

# Kopfrechnen (1)

$1 + 2 = 3$   
 $3 * 2 = 6$   
 $6 : 2 = 3$   
 $3 + 6 = 9$   
 $9 + 19 = 28$   
 $28 * 1 = 28$   
 $28 : 4 = 7$   
 $7 * 3 = 21$   
 $21 * 1 = 21$   
 $21 - 12 = 9$   
 $9 + 2 = 11$   
 $11 : 11 = 1$   
 $1 + 4 = 5$   
 $5 * 1 = 5$   
 $5 + 8 = 13$   
 $13 * 3 = 39$   
 $39 + 15 = 54$   
 $54 + 12 = 66$   
 $66 - 17 = 49$   
 $49 * 1 = 49$   
 $49 - 16 = 33$   
 $33 - 2 = 31$   
 $31 + 17 = 48$   
 $48 - 17 = 31$   
 $31 - 19 = 12$   
 $12 + 20 = 32$   
 $32 * 3 = 96$   
 $96 : 12 = 8$   
 $8 + 16 = 24$   
 $24 + 14 = 38$   
 $38 + 2 = 40$   
 $40 : 4 = 10$   
 $10 + 16 = 26$   
 $26 * 3 = 78$   
 $78 * 1 = 78$   
 $78 : 2 = 39$   
 $39 * 2 = 78$   
 $78 : 3 = 26$

$9 + 7 = 16$   
 $16 - 1 = 15$   
 $15 - 14 = 1$   
 $1 * 1 = 1$   
 $1 + 12 = 13$   
 $13 : 13 = 1$   
 $1 * 1 = 1$   
 $1 + 6 = 7$   
 $7 * 3 = 21$   
 $21 + 2 = 23$   
 $23 - 9 = 14$   
 $14 : 2 = 7$   
 $7 - 6 = 1$   
 $1 + 17 = 18$   
 $18 + 3 = 21$   
 $21 - 11 = 10$   
 $10 + 3 = 13$   
 $13 + 12 = 25$   
 $25 * 1 = 25$   
 $25 : 5 = 5$   
 $5 + 16 = 21$   
 $21 + 20 = 41$   
 $41 + 6 = 47$   
 $47 * 1 = 47$   
 $47 - 6 = 41$   
 $41 - 5 = 36$   
 $36 + 2 = 38$   
 $38 - 16 = 22$   
 $22 - 18 = 4$   
 $4 : 4 = 1$   
 $1 - 1 = 0$   
 $0 + 2 = 2$   
 $2 + 19 = 21$   
 $21 * 2 = 42$   
 $42 + 5 = 47$   
 $47 - 6 = 41$   
 $41 * 1 = 41$   
 $41 + 10 = 51$   
 $10 + 3 = 13$

$13 + 15 = 28$   
 $28 : 2 = 14$   
 $14 * 2 = 28$   
 $28 : 2 = 14$   
 $14 + 8 = 22$   
 $22 * 1 = 22$   
 $22 + 12 = 34$   
 $34 * 2 = 68$   
 $68 - 17 = 51$   
 $51 - 15 = 36$   
 $36 : 12 = 3$   
 $3 - 2 = 1$   
 $1 * 3 = 3$   
 $3 * 1 = 3$   
 $3 : 3 = 1$   
 $1 * 3 = 3$   
 $3 + 18 = 21$   
 $21 * 2 = 42$   
 $42 - 16 = 26$   
 $26 : 13 = 2$   
 $2 + 17 = 19$   
 $19 * 1 = 19$   
 $19 * 2 = 38$   
 $38 : 2 = 19$   
 $19 * 1 = 19$   
 $19 * 1 = 19$   
 $19 * 3 = 57$   
 $57 - 2 = 55$   
 $55 : 5 = 11$   
 $11 + 18 = 29$   
 $29 + 4 = 33$   
 $33 - 2 = 31$   
 $31 + 14 = 45$   
 $45 : 3 = 15$   
 $15 - 8 = 7$   
 $7 * 3 = 21$   
 $21 * 2 = 42$

## Kopfrechnen (2)

$10 + 11 = 21$

$21 : 3 = 7$

$7 * 1 = 7$

$7 - 6 = 1$

$1 * 1 = 1$

$1 * 3 = 3$

$3 * 2 = 6$

$6 : 2 = 3$

$3 * 3 = 9$

$9 + 4 = 13$

$13 - 11 = 2$

$2 : 2 = 1$

$1 + 12 = 13$

$13 - 10 = 3$

$3 + 8 = 11$

$11 : 11 = 1$

$1 + 5 = 6$

$6 : 2 = 3$

$3 * 2 = 6$

$6 : 2 = 3$

$3 : 3 = 1$

$1 + 11 = 12$

$12 * 1 = 12$

$12 : 12 = 1$

$1 * 3 = 3$

$3 * 3 = 9$

$9 * 3 = 27$

$27 + 2 = 29$

$29 + 9 = 38$

$38 : 2 = 19$

$19 * 2 = 38$

$38 + 10 = 48$

$48 - 16 = 32$

$32 - 11 = 21$

$21 : 3 = 7$

$7 + 5 = 12$

$12 - 1 = 11$

$11 * 2 = 22$

$11 + 8 = 19$

$19 - 18 = 1$

$1 + 2 = 3$

$3 - 1 = 2$

$2 * 2 = 4$

$4 + 18 = 22$

$22 - 19 = 3$

$3 * 2 = 6$

$6 * 3 = 18$

$18 + 8 = 26$

$26 * 2 = 52$

$52 * 3 = 156$

$156 - 17 = 139$

$139 - 2 = 137$

$137 * 1 = 137$

$137 - 3 = 134$

$134 + 12 = 146$

$146 : 2 = 73$

$73 - 10 = 63$

$63 : 9 = 7$

$7 * 2 = 14$

$14 - 1 = 13$

$13 : 13 = 1$

$1 + 20 = 21$

$21 : 3 = 7$

$7 + 16 = 23$

$23 + 2 = 25$

$25 - 19 = 6$

$6 - 6 = 0$

$0 + 11 = 11$

$11 : 11 = 1$

$1 + 20 = 21$

$21 : 3 = 7$

$7 * 3 = 21$

$21 + 17 = 38$

$38 + 3 = 41$

$41 * 3 = 123$

$123 * 2 = 246$

$7 + 1 = 8$

$8 : 4 = 2$

$2 * 3 = 6$

$6 : 6 = 1$

$1 * 3 = 3$

$3 * 1 = 3$

$3 + 14 = 17$

$17 * 2 = 34$

$34 + 6 = 40$

$40 - 3 = 37$

$37 + 8 = 45$

$45 * 3 = 135$

$135 * 1 = 135$

$135 + 16 = 151$

$151 + 14 = 165$

$165 : 3 = 55$

$55 - 19 = 36$

$36 : 3 = 12$

$12 + 20 = 32$

$32 * 2 = 64$

$64 : 4 = 16$

$16 + 2 = 18$

$18 * 3 = 54$

$54 + 16 = 70$

$70 - 2 = 68$

$68 : 2 = 34$

$34 + 15 = 49$

$49 - 11 = 38$

$38 : 2 = 19$

$19 * 1 = 19$

$19 * 2 = 38$

$38 + 15 = 53$

$53 - 14 = 39$

$39 * 1 = 39$

$39 * 1 = 39$

$39 - 1 = 38$

$38 * 3 = 114$

$114 * 3 = 342$

## Kopfrechnen (3)

$4 + 16 = 20$	$10 + 17 = 27$	$27 - 19 = 8$
$20 : 10 = 2$	$27 * 2 = 54$	$8 : 4 = 2$
$2 * 1 = 2$	$54 + 3 = 57$	$2 * 3 = 6$
$2 * 3 = 6$	$57 : 3 = 19$	$6 - 1 = 5$
$6 - 1 = 5$	$19 + 2 = 21$	$5 : 5 = 1$
$5 * 3 = 15$	$21 + 12 = 33$	$1 + 15 = 16$
$15 + 10 = 25$	$33 * 3 = 99$	$16 + 10 = 26$
$25 * 3 = 75$	$99 + 7 = 106$	$26 - 14 = 12$
$75 + 10 = 85$	$106 + 18 = 124$	$12 : 12 = 1$
$85 - 18 = 67$	$124 + 19 = 143$	$1 + 11 = 12$
$67 - 8 = 59$	$143 + 2 = 145$	$12 : 4 = 3$
$59 + 20 = 79$	$145 : 5 = 29$	$3 + 16 = 19$
$79 + 3 = 82$	$29 * 2 = 58$	$19 - 6 = 13$
$82 + 5 = 87$	$58 * 2 = 116$	$13 + 6 = 19$
$87 * 3 = 261$	$116 * 3 = 348$	$19 - 4 = 15$
$261 : 9 = 29$	$348 * 3 = 1044$	$15 - 2 = 13$
$29 + 6 = 35$	$1044 * 1 = 1044$	$13 : 13 = 1$
$35 : 7 = 5$	$1044 - 12 = 1032$	$1 * 2 = 2$
$5 + 15 = 20$	$1032 * 2 = 2064$	$2 + 3 = 5$
$20 * 3 = 60$	$2064 * 1 = 2064$	$5 + 4 = 9$
$60 - 12 = 48$	$2064 - 17 = 2047$	$9 + 17 = 26$
$48 + 7 = 55$	$2047 + 16 = 2063$	$26 - 3 = 23$
$55 + 10 = 65$	$2063 - 20 = 2043$	$23 - 4 = 19$
$65 : 5 = 13$	$2043 - 9 = 2034$	$19 * 2 = 38$
$13 + 18 = 31$	$2034 + 3 = 2037$	$38 : 2 = 19$
$31 * 3 = 93$	$2037 - 16 = 2021$	$19 + 9 = 28$
$93 * 1 = 93$	$2021 - 17 = 2004$	$28 + 13 = 41$
$93 * 1 = 93$	$2004 : 4 = 501$	$41 * 1 = 41$
$93 - 12 = 81$	$501 + 8 = 509$	$41 + 11 = 52$
$81 * 3 = 243$	$509 + 4 = 513$	$52 - 12 = 40$
$243 + 8 = 251$	$513 * 2 = 1026$	$40 : 4 = 10$
$251 - 5 = 246$	$1026 : 3 = 342$	$10 + 19 = 29$
$246 - 9 = 237$	$342 + 11 = 353$	$29 - 7 = 22$
$237 + 16 = 253$	$353 + 9 = 362$	$22 : 11 = 2$
$253 : 11 = 23$	$362 : 2 = 181$	$2 * 3 = 6$
$23 + 3 = 26$	$181 + 7 = 188$	$6 + 19 = 25$
$26 : 2 = 13$	$188 - 8 = 180$	$25 * 2 = 50$
$13 - 1 = 12$	$180 : 6 = 30$	
	$7 + 20 = 27$	

## Kopfrechnen (4)

$10 + 12 = 22$	$10 + 13 = 23$	$29 * 3 = 87$
$22 * 2 = 44$	$23 + 19 = 42$	$87 - 6 = 81$
$44 * 2 = 88$	$42 + 8 = 50$	$81 + 18 = 99$
$88 - 10 = 78$	$50 : 10 = 5$	$99 - 14 = 85$
$78 * 1 = 78$	$5 : 5 = 1$	$85 - 18 = 67$
$78 + 5 = 83$	$1 + 6 = 7$	$67 - 4 = 63$
$83 - 14 = 69$	$7 * 2 = 14$	$63 - 6 = 57$
$69 - 6 = 63$	$14 * 2 = 28$	$57 * 1 = 57$
$63 + 1 = 64$	$28 + 6 = 34$	$57 * 3 = 171$
$64 : 2 = 32$	$34 * 3 = 102$	$171 + 11 = 182$
$32 * 3 = 96$	$102 - 15 = 87$	$182 * 3 = 546$
$96 * 2 = 192$	$87 + 2 = 89$	$546 - 18 = 528$
$192 * 2 = 384$	$89 + 9 = 98$	$528 + 12 = 540$
$384 * 3 = 1152$	$98 + 7 = 105$	$540 * 2 = 1080$
$1152 * 3 = 3456$	$105 + 4 = 109$	$1080 : 9 = 120$
$3456 * 2 = 6912$	$109 + 8 = 117$	$120 - 7 = 113$
$6912 * 3 = 20736$	$117 * 2 = 234$	$113 + 9 = 122$
$20736 + 20 = 20756$	$234 * 2 = 468$	$122 + 11 = 133$
$20756 - 18 = 20738$	$468 * 3 = 1404$	$133 * 1 = 133$
$20738 : 2 = 10369$	$1404 - 18 = 1386$	$133 - 14 = 119$
$10369 - 5 = 10364$	$1386 * 2 = 2772$	$119 - 9 = 110$
$10364 * 2 = 20728$	$2772 : 9 = 308$	$110 - 10 = 100$
$20728 : 2 = 10364$	$308 + 13 = 321$	$100 : 4 = 25$
$10364 + 10 = 10374$	$321 - 4 = 317$	$25 + 17 = 42$
$10374 - 14 = 10360$	$317 + 11 = 328$	$42 * 1 = 42$
$10360 - 14 = 10346$	$328 - 20 = 308$	$42 - 18 = 24$
$10346 : 2 = 5173$	$308 + 11 = 319$	$24 * 3 = 72$
$5173 : 7 = 739$	$319 * 2 = 638$	$72 : 12 = 6$
$739 * 2 = 1478$	$638 - 19 = 619$	$6 : 2 = 3$
$1478 - 7 = 1471$	$619 * 2 = 1238$	$3 + 14 = 17$
$1471 + 2 = 1473$	$1238 + 6 = 1244$	$17 * 1 = 17$
$1473 - 12 = 1461$	$1244 + 12 = 1256$	$17 + 20 = 37$
$1461 - 2 = 1459$	$1256 + 8 = 1264$	$37 - 9 = 28$
$1459 * 1 = 1459$	$1264 : 8 = 158$	$28 + 15 = 43$
$1459 - 16 = 1443$	$158 + 13 = 171$	$43 + 13 = 56$
$1443 - 14 = 1429$	$171 : 9 = 19$	$56 - 4 = 52$
$1429 - 10 = 1419$	$19 + 13 = 32$	$52 : 4 = 13$
$1419 - 10 = 1409$	$32 - 16 = 16$	
	$12 + 17 = 29$	

## Kopfrechnen (5)

$6 + 1 = 7$	$4 + 20 = 24$	$23 - 7 = 16$
$7 + 16 = 23$	$24 : 3 = 8$	$16 - 9 = 7$
$23 * 1 = 23$	$8 - 6 = 2$	$7 * 3 = 21$
$23 - 1 = 22$	$2 : 2 = 1$	$21 - 9 = 12$
$22 + 20 = 42$	$1 * 1 = 1$	$12 + 2 = 14$
$42 * 2 = 84$	$1 * 3 = 3$	$14 - 5 = 9$
$84 - 17 = 67$	$3 + 10 = 13$	$9 : 9 = 1$
$67 - 16 = 51$	$13 : 13 = 1$	$1 + 1 = 2$
$51 - 7 = 44$	$1 + 18 = 19$	$2 * 1 = 2$
$44 - 11 = 33$	$19 * 3 = 57$	$2 : 2 = 1$
$33 + 16 = 49$	$57 + 3 = 60$	$1 + 13 = 14$
$49 - 3 = 46$	$60 + 19 = 79$	$14 + 19 = 33$
$46 - 8 = 38$	$79 + 17 = 96$	$33 : 11 = 3$
$38 - 6 = 32$	$96 - 14 = 82$	$3 + 15 = 18$
$32 : 8 = 4$	$82 + 17 = 99$	$18 - 4 = 14$
$4 * 2 = 8$	$99 * 2 = 198$	$14 + 5 = 19$
$8 + 1 = 9$	$198 + 9 = 207$	$19 - 16 = 3$
$9 + 9 = 18$	$207 + 10 = 217$	$3 * 2 = 6$
$18 * 2 = 36$	$217 * 1 = 217$	$6 + 19 = 25$
$36 + 4 = 40$	$217 - 4 = 213$	$25 : 5 = 5$
$40 : 8 = 5$	$213 : 3 = 71$	$5 + 7 = 12$
$5 + 18 = 23$	$71 - 19 = 52$	$12 : 6 = 2$
$23 - 17 = 6$	$52 * 3 = 156$	$2 * 1 = 2$
$6 : 2 = 3$	$156 + 17 = 173$	$2 * 3 = 6$
$3 + 10 = 13$	$173 * 1 = 173$	$6 : 2 = 3$
$13 : 13 = 1$	$173 * 1 = 173$	$3 + 20 = 23$
$1 + 10 = 11$	$173 * 1 = 173$	$23 - 12 = 11$
$11 + 15 = 26$	$173 + 19 = 192$	$11 + 18 = 29$
$26 + 15 = 41$	$192 - 13 = 179$	$29 + 6 = 35$
$41 * 3 = 123$	$179 - 7 = 172$	$35 + 12 = 47$
$123 * 1 = 123$	$172 * 1 = 172$	$47 * 2 = 94$
$123 - 13 = 110$	$172 - 17 = 155$	$94 : 2 = 47$
$110 : 5 = 22$	$155 - 11 = 144$	$47 * 3 = 141$
$22 * 2 = 44$	$144 : 2 = 72$	$141 - 20 = 121$
$44 : 2 = 22$	$72 : 8 = 9$	$121 + 6 = 127$
$22 + 10 = 32$	$9 * 1 = 9$	$127 - 9 = 118$
$32 + 9 = 41$	$9 + 11 = 20$	$118 * 1 = 118$
$41 * 1 = 41$	$20 + 9 = 29$	
	$9 + 14 = 23$	

## Kopfrechnen (6)

$5 + 4 = 9$   
 $9 + 14 = 23$   
 $23 * 2 = 46$   
 $46 + 8 = 54$   
 $54 * 1 = 54$   
 $54 + 9 = 63$   
 $63 - 4 = 59$   
 $59 - 18 = 41$   
 $41 + 13 = 54$   
 $54 * 1 = 54$   
 $54 + 15 = 69$   
 $69 + 4 = 73$   
 $73 + 1 = 74$   
 $74 + 8 = 82$   
 $82 - 10 = 72$   
 $72 * 1 = 72$   
 $72 : 3 = 24$   
 $24 + 9 = 33$   
 $33 + 9 = 42$   
 $42 * 3 = 126$   
 $126 + 15 = 141$   
 $141 + 7 = 148$   
 $148 : 2 = 74$   
 $74 + 2 = 76$   
 $76 : 4 = 19$   
 $19 - 2 = 17$   
 $17 + 5 = 22$   
 $22 - 14 = 8$   
 $8 : 8 = 1$   
 $1 + 15 = 16$   
 $16 * 2 = 32$   
 $32 * 2 = 64$   
 $64 * 3 = 192$   
 $192 : 2 = 96$   
 $96 - 1 = 95$   
 $95 * 3 = 285$   
 $285 + 1 = 286$   
 $286 : 11 = 26$

$10 + 15 = 25$   
 $25 * 1 = 25$   
 $25 : 5 = 5$   
 $5 + 7 = 12$   
 $12 - 4 = 8$   
 $8 + 2 = 10$   
 $10 - 9 = 1$   
 $1 + 1 = 2$   
 $2 - 2 = 0$   
 $0 + 17 = 17$   
 $17 + 12 = 29$   
 $29 * 3 = 87$   
 $87 : 3 = 29$   
 $29 * 1 = 29$   
 $29 + 3 = 32$   
 $32 + 14 = 46$   
 $46 - 18 = 28$   
 $28 : 2 = 14$   
 $14 + 4 = 18$   
 $18 * 2 = 36$   
 $36 : 3 = 12$   
 $12 - 6 = 6$   
 $6 + 20 = 26$   
 $26 - 20 = 6$   
 $6 : 6 = 1$   
 $1 + 7 = 8$   
 $8 * 1 = 8$   
 $8 : 2 = 4$   
 $4 * 3 = 12$   
 $12 * 3 = 36$   
 $36 * 2 = 72$   
 $72 : 12 = 6$   
 $6 * 3 = 18$   
 $18 * 1 = 18$   
 $18 - 1 = 17$   
 $17 + 19 = 36$   
 $36 - 4 = 32$   
 $32 - 14 = 18$   
 $7 + 19 = 26$

$26 + 8 = 34$   
 $34 + 15 = 49$   
 $49 - 12 = 37$   
 $37 + 11 = 48$   
 $48 + 20 = 68$   
 $68 + 18 = 86$   
 $86 - 15 = 71$   
 $71 - 17 = 54$   
 $54 : 2 = 27$   
 $27 * 3 = 81$   
 $81 + 4 = 85$   
 $85 + 12 = 97$   
 $97 * 3 = 291$   
 $291 * 3 = 873$   
 $873 + 4 = 877$   
 $877 * 2 = 1754$   
 $1754 : 2 = 877$   
 $877 * 2 = 1754$   
 $1754 : 2 = 877$   
 $877 + 1 = 878$   
 $878 + 13 = 891$   
 $891 : 11 = 81$   
 $81 * 3 = 243$   
 $243 - 9 = 234$   
 $234 : 13 = 18$   
 $18 : 6 = 3$   
 $3 * 1 = 3$   
 $3 + 15 = 18$   
 $18 : 6 = 3$   
 $3 + 16 = 19$   
 $19 + 11 = 30$   
 $30 * 2 = 60$   
 $60 : 6 = 10$   
 $10 * 1 = 10$   
 $10 * 3 = 30$   
 $30 + 8 = 38$   
 $38 * 3 = 114$

## Kopfrechnen (7)

$11 + 14 = 25$

$25 - 3 = 22$

$22 : 2 = 11$

$11 * 3 = 33$

$33 : 3 = 11$

$11 + 13 = 24$

$24 : 3 = 8$

$8 * 2 = 16$

$16 + 18 = 34$

$34 * 3 = 102$

$102 - 20 = 82$

$82 + 15 = 97$

$97 * 3 = 291$

$291 * 3 = 873$

$873 : 9 = 97$

$97 * 3 = 291$

$291 * 1 = 291$

$291 * 2 = 582$

$582 * 3 = 1746$

$1746 - 11 = 1735$

$1735 + 14 = 1749$

$1749 - 20 = 1729$

$1729 + 2 = 1731$

$1731 - 13 = 1718$

$1718 - 17 = 1701$

$1701 + 12 = 1713$

$1713 - 13 = 1700$

$1700 * 3 = 5100$

$5100 + 3 = 5103$

$5103 - 12 = 5091$

$5091 - 17 = 5074$

$5074 - 2 = 5072$

$5072 : 4 = 1268$

$1268 + 14 = 1282$

$1282 - 1 = 1281$

$1281 : 3 = 427$

$427 * 2 = 854$

$854 : 7 = 122$

$8 + 9 = 17$

$17 - 13 = 4$

$4 * 3 = 12$

$12 * 3 = 36$

$36 * 1 = 36$

$36 * 1 = 36$

$36 + 13 = 49$

$49 - 14 = 35$

$35 + 1 = 36$

$36 : 4 = 9$

$9 + 12 = 21$

$21 * 3 = 63$

$63 : 9 = 7$

$7 * 1 = 7$

$7 + 9 = 16$

$16 : 8 = 2$

$2 + 16 = 18$

$18 : 3 = 6$

$6 - 4 = 2$

$2 : 2 = 1$

$1 * 2 = 2$

$2 + 12 = 14$

$14 : 7 = 2$

$2 * 1 = 2$

$2 + 2 = 4$

$4 : 2 = 2$

$2 * 1 = 2$

$2 + 4 = 6$

$6 : 2 = 3$

$3 + 8 = 11$

$11 * 2 = 22$

$22 * 1 = 22$

$22 + 8 = 30$

$30 * 1 = 30$

$30 + 7 = 37$

$37 + 10 = 47$

$47 * 2 = 94$

$94 + 17 = 111$

$10 + 2 = 12$

$12 * 2 = 24$

$24 + 13 = 37$

$37 * 3 = 111$

$111 - 12 = 99$

$99 - 18 = 81$

$81 - 11 = 70$

$70 * 3 = 210$

$210 + 3 = 213$

$213 * 3 = 639$

$639 : 9 = 71$

$71 * 2 = 142$

$142 + 1 = 143$

$143 + 20 = 163$

$163 * 1 = 163$

$163 - 9 = 154$

$154 * 3 = 462$

$462 : 11 = 42$

$42 : 2 = 21$

$21 - 9 = 12$

$12 - 2 = 10$

$10 : 2 = 5$

$5 : 5 = 1$

$1 * 2 = 2$

$2 + 3 = 5$

$5 : 5 = 1$

$1 + 20 = 21$

$21 * 1 = 21$

$21 * 3 = 63$

$63 * 1 = 63$

$63 - 15 = 48$

$48 * 3 = 144$

$144 - 6 = 138$

$138 - 10 = 128$

$128 * 3 = 384$

$384 - 18 = 366$

$366 * 1 = 366$

$366 * 3 = 1098$

## Kopfrechnen (8)

$12 + 7 = 19$

$19 - 15 = 4$

$4 : 4 = 1$

$1 + 3 = 4$

$4 * 3 = 12$

$12 + 2 = 14$

$14 + 15 = 29$

$29 * 3 = 87$

$87 - 12 = 75$

$75 : 3 = 25$

$25 : 5 = 5$

$5 + 13 = 18$

$18 : 3 = 6$

$6 : 3 = 2$

$2 : 2 = 1$

$1 + 10 = 11$

$11 * 3 = 33$

$33 + 13 = 46$

$46 + 8 = 54$

$54 * 1 = 54$

$54 : 2 = 27$

$27 - 18 = 9$

$9 * 2 = 18$

$18 * 3 = 54$

$54 : 3 = 18$

$18 + 3 = 21$

$21 + 2 = 23$

$23 * 3 = 69$

$69 * 1 = 69$

$69 + 15 = 84$

$84 : 7 = 12$

$12 * 3 = 36$

$36 - 8 = 28$

$28 + 3 = 31$

$31 * 3 = 93$

$93 * 2 = 186$

$186 * 3 = 558$

$558 * 1 = 558$

$4 + 17 = 21$

$21 * 1 = 21$

$21 : 7 = 3$

$3 * 1 = 3$

$3 * 1 = 3$

$3 + 15 = 18$

$18 : 6 = 3$

$3 * 3 = 9$

$9 + 16 = 25$

$25 + 11 = 36$

$36 + 15 = 51$

$51 * 2 = 102$

$102 * 2 = 204$

$204 - 9 = 195$

$195 * 3 = 585$

$585 * 3 = 1755$

$1755 + 16 = 1771$

$1771 - 15 = 1756$

$1756 - 15 = 1741$

$1741 - 11 = 1730$

$1730 + 17 = 1747$

$1747 + 16 = 1763$

$1763 + 4 = 1767$

$1767 - 20 = 1747$

$1747 + 4 = 1751$

$1751 - 9 = 1742$

$1742 + 11 = 1753$

$1753 * 1 = 1753$

$1753 * 1 = 1753$

$1753 - 20 = 1733$

$1733 - 14 = 1719$

$1719 * 2 = 3438$

$3438 : 6 = 573$

$573 : 3 = 191$

$191 + 14 = 205$

$205 * 2 = 410$

$410 - 2 = 408$

$408 - 16 = 392$

$4 + 9 = 13$

$13 + 12 = 25$

$25 + 19 = 44$

$44 + 5 = 49$

$49 : 7 = 7$

$7 - 5 = 2$

$2 * 2 = 4$

$4 + 5 = 9$

$9 * 1 = 9$

$9 + 6 = 15$

$15 + 19 = 34$

$34 + 5 = 39$

$39 - 3 = 36$

$36 * 1 = 36$

$36 - 20 = 16$

$16 : 4 = 4$

$4 : 2 = 2$

$2 * 3 = 6$

$6 * 1 = 6$

$6 + 20 = 26$

$26 : 2 = 13$

$13 : 13 = 1$

$1 * 2 = 2$

$2 * 1 = 2$

$2 * 3 = 6$

$6 * 2 = 12$

$12 + 18 = 30$

$30 + 10 = 40$

$40 * 3 = 120$

$120 : 8 = 15$

$15 * 2 = 30$

$30 * 1 = 30$

$30 - 20 = 10$

$10 - 3 = 7$

$7 * 3 = 21$

$21 - 11 = 10$

$10 + 1 = 11$

$11 : 11 = 1$



## Kopfrechnen (9)

$1 + 5 = 6$	$1 + 6 = 7$	$19 * 1 = 19$
$6 + 16 = 22$	$7 * 3 = 21$	$19 - 18 = 1$
$22 + 1 = 23$	$21 + 9 = 30$	$1 + 15 = 16$
$23 * 3 = 69$	$30 * 3 = 90$	$16 : 8 = 2$
$69 : 3 = 23$	$90 : 10 = 9$	$2 + 8 = 10$
$23 * 3 = 69$	$9 : 9 = 1$	$10 : 10 = 1$
$69 * 2 = 138$	$1 * 1 = 1$	$1 * 3 = 3$
$138 - 3 = 135$	$1 * 3 = 3$	$3 + 4 = 7$
$135 - 2 = 133$	$3 + 6 = 9$	$7 : 7 = 1$
$133 + 14 = 147$	$9 + 19 = 28$	$1 * 1 = 1$
$147 + 4 = 151$	$28 + 8 = 36$	$1 + 17 = 18$
$151 + 1 = 152$	$36 : 12 = 3$	$18 + 12 = 30$
$152 * 2 = 304$	$3 : 3 = 1$	$30 : 10 = 3$
$304 - 14 = 290$	$1 + 4 = 5$	$3 * 3 = 9$
$290 * 2 = 580$	$5 * 1 = 5$	$9 - 5 = 4$
$580 : 5 = 116$	$5 + 19 = 24$	$4 * 3 = 12$
$116 * 3 = 348$	$24 + 14 = 38$	$12 + 2 = 14$
$348 * 3 = 1044$	$38 - 4 = 34$	$14 - 2 = 12$
$1044 : 3 = 348$	$34 + 2 = 36$	$12 : 2 = 6$
$348 + 7 = 355$	$36 * 3 = 108$	$6 * 2 = 12$
$355 : 5 = 71$	$108 * 3 = 324$	$12 : 4 = 3$
$71 * 2 = 142$	$324 * 1 = 324$	$3 * 3 = 9$
$142 : 2 = 71$	$324 * 2 = 648$	$9 + 18 = 27$
$71 * 2 = 142$	$648 - 20 = 628$	$27 * 1 = 27$
$142 - 8 = 134$	$628 + 19 = 647$	$27 * 2 = 54$
$134 + 11 = 145$	$647 + 16 = 663$	$54 * 2 = 108$
$145 + 20 = 165$	$663 + 3 = 666$	$108 * 2 = 216$
$165 - 20 = 145$	$666 : 9 = 74$	$216 : 2 = 108$
$145 + 5 = 150$	$74 * 2 = 148$	$108 : 4 = 27$
$150 : 5 = 30$	$148 - 11 = 137$	$27 : 9 = 3$
$30 : 3 = 10$	$137 * 3 = 411$	$3 + 4 = 7$
$10 : 5 = 2$	$411 * 3 = 1233$	$7 - 3 = 4$
$2 * 1 = 2$	$1233 - 20 = 1213$	$4 * 3 = 12$
$2 + 17 = 19$	$1213 - 13 = 1200$	$12 + 17 = 29$
$19 * 3 = 57$	$1200 + 4 = 1204$	$29 - 10 = 19$
$57 + 9 = 66$	$1204 + 11 = 1215$	$19 * 2 = 38$
$66 - 1 = 65$	$1215 : 9 = 135$	$38 * 2 = 76$
$65 : 13 = 5$	$135 : 3 = 45$	
	$8 + 11 = 19$	

## Kopfrechnen (10)

$12 + 16 = 28$

$28 * 2 = 56$

$56 - 18 = 38$

$38 - 16 = 22$

$22 - 2 = 20$

$20 + 6 = 26$

$26 : 13 = 2$

$2 : 2 = 1$

$1 * 2 = 2$

$2 : 2 = 1$

$1 + 5 = 6$

$6 : 6 = 1$

$1 + 4 = 5$

$5 : 5 = 1$

$1 + 11 = 12$

$12 + 5 = 17$

$17 - 14 = 3$

$3 + 6 = 9$

$9 + 2 = 11$

$11 * 3 = 33$

$33 : 11 = 3$

$3 * 3 = 9$

$9 * 3 = 27$

$27 * 3 = 81$

$81 - 1 = 80$

$80 - 14 = 66$

$66 * 3 = 198$

$198 : 9 = 22$

$22 - 11 = 11$

$11 : 11 = 1$

$1 * 2 = 2$

$2 * 2 = 4$

$4 : 4 = 1$

$1 + 16 = 17$

$17 * 1 = 17$

$17 - 9 = 8$

$8 : 4 = 2$

$2 + 1 = 3$

$3 + 20 = 23$

$23 * 3 = 69$

$69 : 3 = 23$

$23 + 7 = 30$

$30 : 5 = 6$

$6 + 4 = 10$

$10 * 2 = 20$

$20 * 2 = 40$

$40 + 15 = 55$

$55 * 3 = 165$

$165 : 11 = 15$

$15 - 2 = 13$

$13 : 13 = 1$

$1 * 1 = 1$

$1 * 1 = 1$

$1 + 8 = 9$

$9 * 1 = 9$

$9 - 1 = 8$

$8 * 2 = 16$

$16 * 2 = 32$

$32 : 4 = 8$

$8 + 2 = 10$

$10 : 5 = 2$

$2 + 19 = 21$

$21 : 3 = 7$

$7 * 2 = 14$

$14 + 3 = 17$

$17 + 14 = 31$

$31 * 2 = 62$

$62 : 2 = 31$

$31 * 1 = 31$

$31 - 13 = 18$

$18 * 1 = 18$

$18 - 10 = 8$

$8 : 4 = 2$

$2 + 4 = 6$

$6 + 12 = 18$

$18 - 15 = 3$

$6 + 20 = 26$

$26 + 6 = 32$

$32 * 1 = 32$

$32 + 18 = 50$

$50 * 3 = 150$

$150 + 8 = 158$

$158 : 2 = 79$

$79 - 9 = 70$

$70 * 3 = 210$

$210 * 1 = 210$

$210 - 5 = 205$

$205 : 5 = 41$

$41 - 11 = 30$

$30 : 2 = 15$

$15 * 1 = 15$

$15 * 1 = 15$

$15 * 2 = 30$

$30 + 10 = 40$

$40 * 3 = 120$

$120 + 14 = 134$

$134 * 1 = 134$

$134 + 5 = 139$

$139 * 2 = 278$

$278 : 2 = 139$

$139 - 1 = 138$

$138 * 3 = 414$

$414 * 2 = 828$

$828 - 17 = 811$

$811 + 15 = 826$

$826 * 1 = 826$

$826 * 2 = 1652$

$1652 : 2 = 826$

$826 : 2 = 413$

$413 - 15 = 398$

$398 * 2 = 796$

$796 - 10 = 786$

$786 - 15 = 771$

$771 - 13 = 758$

## Kopfrechnen (11)

$11 + 16 = 27$	$8 + 6 = 14$	$6 - 5 = 1$
$27 - 13 = 14$	$14 - 13 = 1$	$1 * 2 = 2$
$14 * 2 = 28$	$1 * 2 = 2$	$2 * 2 = 4$
$28 : 2 = 14$	$2 : 2 = 1$	$4 + 8 = 12$
$14 : 2 = 7$	$1 + 18 = 19$	$12 * 2 = 24$
$7 + 8 = 15$	$19 + 17 = 36$	$24 : 12 = 2$
$15 : 3 = 5$	$36 - 14 = 22$	$2 + 8 = 10$
$5 : 5 = 1$	$22 : 11 = 2$	$10 + 2 = 12$
$1 + 10 = 11$	$2 + 8 = 10$	$12 * 3 = 36$
$11 * 1 = 11$	$10 : 5 = 2$	$36 + 18 = 54$
$11 * 1 = 11$	$2 + 2 = 4$	$54 : 6 = 9$
$11 + 14 = 25$	$4 + 8 = 12$	$9 * 1 = 9$
$25 + 7 = 32$	$12 + 18 = 30$	$9 : 3 = 3$
$32 - 11 = 21$	$30 : 6 = 5$	$3 * 1 = 3$
$21 - 7 = 14$	$5 + 19 = 24$	$3 + 16 = 19$
$14 + 14 = 28$	$24 + 5 = 29$	$19 - 7 = 12$
$28 + 14 = 42$	$29 * 3 = 87$	$12 + 7 = 19$
$42 - 6 = 36$	$87 - 5 = 82$	$19 - 13 = 6$
$36 : 12 = 3$	$82 * 2 = 164$	$6 * 3 = 18$
$3 + 9 = 12$	$164 - 19 = 145$	$18 - 18 = 0$
$12 * 2 = 24$	$145 : 5 = 29$	$0 + 6 = 6$
$24 * 1 = 24$	$29 + 17 = 46$	$6 + 4 = 10$
$24 + 12 = 36$	$46 + 8 = 54$	$10 + 19 = 29$
$36 - 6 = 30$	$54 : 3 = 18$	$29 * 2 = 58$
$30 - 4 = 26$	$18 * 1 = 18$	$58 - 19 = 39$
$26 * 1 = 26$	$18 * 1 = 18$	$39 * 2 = 78$
$26 * 3 = 78$	$18 : 6 = 3$	$78 : 13 = 6$
$78 * 3 = 234$	$3 + 16 = 19$	$6 - 6 = 0$
$234 + 16 = 250$	$19 - 4 = 15$	$0 + 1 = 1$
$250 : 10 = 25$	$15 - 1 = 14$	$1 + 8 = 9$
$25 - 5 = 20$	$14 * 1 = 14$	$9 + 19 = 28$
$20 - 7 = 13$	$14 + 13 = 27$	$28 : 4 = 7$
$13 : 13 = 1$	$27 * 3 = 81$	$7 : 7 = 1$
$1 + 5 = 6$	$81 * 1 = 81$	$1 * 1 = 1$
$6 + 19 = 25$	$81 * 2 = 162$	$1 * 3 = 3$
$25 : 5 = 5$	$162 + 9 = 171$	$3 : 3 = 1$
$5 * 1 = 5$	$171 + 2 = 173$	$1 + 20 = 21$
$5 : 5 = 1$	$173 - 9 = 164$	
	$5 + 1 = 6$	

## Kopfrechnen (12)

$11 + 2 = 13$	$4 + 11 = 15$	$12 + 6 = 18$
$13 * 2 = 26$	$15 + 7 = 22$	$18 : 6 = 3$
$26 * 2 = 52$	$22 * 1 = 22$	$3 : 3 = 1$
$52 * 2 = 104$	$22 + 8 = 30$	$1 + 3 = 4$
$104 + 7 = 111$	$30 * 2 = 60$	$4 + 6 = 10$
$111 * 2 = 222$	$60 * 2 = 120$	$10 + 8 = 18$
$222 + 14 = 236$	$120 + 8 = 128$	$18 : 6 = 3$
$236 + 5 = 241$	$128 : 4 = 32$	$3 + 5 = 8$
$241 + 8 = 249$	$32 * 3 = 96$	$8 + 15 = 23$
$249 + 17 = 266$	$96 : 6 = 16$	$23 * 2 = 46$
$266 + 7 = 273$	$16 * 2 = 32$	$46 : 2 = 23$
$273 - 16 = 257$	$32 - 5 = 27$	$23 + 1 = 24$
$257 + 6 = 263$	$27 + 6 = 33$	$24 * 2 = 48$
$263 - 3 = 260$	$33 - 1 = 32$	$48 * 3 = 144$
$260 : 2 = 130$	$32 + 20 = 52$	$144 - 17 = 127$
$130 + 6 = 136$	$52 + 14 = 66$	$127 * 1 = 127$
$136 * 2 = 272$	$66 - 18 = 48$	$127 * 1 = 127$
$272 + 20 = 292$	$48 * 2 = 96$	$127 - 15 = 112$
$292 - 5 = 287$	$96 + 20 = 116$	$112 * 2 = 224$
$287 * 1 = 287$	$116 + 6 = 122$	$224 : 8 = 28$
$287 * 1 = 287$	$122 : 2 = 61$	$28 : 4 = 7$
$287 - 5 = 282$	$61 + 12 = 73$	$7 : 7 = 1$
$282 : 3 = 94$	$73 - 2 = 71$	$1 - 1 = 0$
$94 * 2 = 188$	$71 * 2 = 142$	$0 + 13 = 13$
$188 + 11 = 199$	$142 * 1 = 142$	$13 * 2 = 26$
$199 + 7 = 206$	$142 * 3 = 426$	$26 * 3 = 78$
$206 + 13 = 219$	$426 : 2 = 213$	$78 * 3 = 234$
$219 * 2 = 438$	$213 + 6 = 219$	$234 * 3 = 702$
$438 : 6 = 73$	$219 - 7 = 212$	$702 : 3 = 234$
$73 + 6 = 79$	$212 - 1 = 211$	$234 + 11 = 245$
$79 + 16 = 95$	$211 + 6 = 217$	$245 * 1 = 245$
$95 * 1 = 95$	$217 * 2 = 434$	$245 - 11 = 234$
$95 * 2 = 190$	$434 - 15 = 419$	$234 - 4 = 230$
$190 - 2 = 188$	$419 + 6 = 425$	$230 + 13 = 243$
$188 : 2 = 94$	$425 - 20 = 405$	$243 + 17 = 260$
$94 - 15 = 79$	$405 : 5 = 81$	$260 - 9 = 251$
$79 + 19 = 98$	$81 : 3 = 27$	$251 + 19 = 270$
$98 - 16 = 82$	$27 - 2 = 25$	
	$3 + 9 = 12$	

## Kopfrechnen (13)

$9 + 1 = 10$   
 $10 * 3 = 30$   
 $30 * 3 = 90$   
 $90 - 19 = 71$   
 $71 * 3 = 213$   
 $213 - 4 = 209$   
 $209 - 9 = 200$   
 $200 * 2 = 400$   
 $400 * 2 = 800$   
 $800 + 14 = 814$   
 $814 * 1 = 814$   
 $814 + 11 = 825$   
 $825 * 1 = 825$   
 $825 : 3 = 275$   
 $275 + 4 = 279$   
 $279 * 1 = 279$   
 $279 + 14 = 293$   
 $293 * 1 = 293$   
 $293 + 5 = 298$   
 $298 : 2 = 149$   
 $149 + 16 = 165$   
 $165 - 11 = 154$   
 $154 - 7 = 147$   
 $147 - 13 = 134$   
 $134 * 3 = 402$   
 $402 : 2 = 201$   
 $201 * 3 = 603$   
 $603 + 18 = 621$   
 $621 + 19 = 640$   
 $640 * 3 = 1920$   
 $1920 * 2 = 3840$   
 $3840 - 13 = 3827$   
 $3827 - 8 = 3819$   
 $3819 + 13 = 3832$   
 $3832 - 10 = 3822$   
 $3822 + 3 = 3825$   
 $3825 * 3 = 11475$   
 $11475 : 9 = 1275$

$6 + 7 = 13$   
 $13 + 7 = 20$   
 $20 + 4 = 24$   
 $24 * 3 = 72$   
 $72 * 2 = 144$   
 $144 : 9 = 16$   
 $16 + 7 = 23$   
 $23 + 18 = 41$   
 $41 - 15 = 26$   
 $26 - 6 = 20$   
 $20 * 2 = 40$   
 $40 * 2 = 80$   
 $80 * 1 = 80$   
 $80 * 3 = 240$   
 $240 * 2 = 480$   
 $480 : 2 = 240$   
 $240 * 2 = 480$   
 $480 + 8 = 488$   
 $488 * 1 = 488$   
 $488 - 9 = 479$   
 $479 - 1 = 478$   
 $478 * 3 = 1434$   
 $1434 * 1 = 1434$   
 $1434 - 17 = 1417$   
 $1417 * 2 = 2834$   
 $2834 + 2 = 2836$   
 $2836 + 16 = 2852$   
 $2852 - 5 = 2847$   
 $2847 - 9 = 2838$   
 $2838 : 3 = 946$   
 $946 : 2 = 473$   
 $473 : 11 = 43$   
 $43 - 18 = 25$   
 $25 : 5 = 5$   
 $5 + 6 = 11$   
 $11 : 11 = 1$   
 $1 + 17 = 18$   
 $18 - 13 = 5$   
 $5 + 19 = 24$

$24 - 13 = 11$   
 $11 + 7 = 18$   
 $18 - 16 = 2$   
 $2 * 2 = 4$   
 $4 + 17 = 21$   
 $21 + 6 = 27$   
 $27 : 9 = 3$   
 $3 * 2 = 6$   
 $6 * 2 = 12$   
 $12 + 14 = 26$   
 $26 * 3 = 78$   
 $78 - 6 = 72$   
 $72 - 7 = 65$   
 $65 - 6 = 59$   
 $59 + 7 = 66$   
 $66 + 20 = 86$   
 $86 : 2 = 43$   
 $43 * 1 = 43$   
 $43 + 8 = 51$   
 $51 - 1 = 50$   
 $50 : 2 = 25$   
 $25 + 19 = 44$   
 $44 + 4 = 48$   
 $48 * 3 = 144$   
 $144 : 3 = 48$   
 $48 * 1 = 48$   
 $48 : 3 = 16$   
 $16 * 3 = 48$   
 $48 : 6 = 8$   
 $8 * 2 = 16$   
 $16 + 15 = 31$   
 $31 + 4 = 35$   
 $35 : 7 = 5$   
 $5 + 17 = 22$   
 $22 + 5 = 27$   
 $27 + 20 = 47$   
 $47 - 8 = 39$

## Kopfrechnen (14)

$1 + 17 = 18$	$4 + 9 = 13$	$16 + 4 = 20$
$18 : 6 = 3$	$13 + 20 = 33$	$20 : 5 = 4$
$3 * 3 = 9$	$33 - 14 = 19$	$4 * 3 = 12$
$9 : 9 = 1$	$19 * 3 = 57$	$12 - 3 = 9$
$1 + 11 = 12$	$57 - 8 = 49$	$9 + 6 = 15$
$12 + 18 = 30$	$49 * 3 = 147$	$15 * 1 = 15$
$30 * 2 = 60$	$147 - 9 = 138$	$15 : 3 = 5$
$60 * 1 = 60$	$138 : 2 = 69$	$5 * 3 = 15$
$60 - 17 = 43$	$69 : 3 = 23$	$15 + 14 = 29$
$43 * 2 = 86$	$23 + 18 = 41$	$29 + 15 = 44$
$86 * 2 = 172$	$41 * 3 = 123$	$44 + 9 = 53$
$172 - 16 = 156$	$123 : 3 = 41$	$53 * 1 = 53$
$156 * 1 = 156$	$41 - 16 = 25$	$53 * 1 = 53$
$156 + 20 = 176$	$25 + 1 = 26$	$53 + 2 = 55$
$176 - 14 = 162$	$26 * 2 = 52$	$55 : 11 = 5$
$162 - 8 = 154$	$52 - 8 = 44$	$5 * 3 = 15$
$154 : 11 = 14$	$44 + 12 = 56$	$15 - 12 = 3$
$14 + 12 = 26$	$56 : 7 = 8$	$3 * 2 = 6$
$26 + 13 = 39$	$8 + 5 = 13$	$6 : 3 = 2$
$39 + 20 = 59$	$13 * 1 = 13$	$2 * 2 = 4$
$59 + 3 = 62$	$13 * 2 = 26$	$4 + 9 = 13$
$62 : 2 = 31$	$26 - 10 = 16$	$13 * 3 = 39$
$31 - 19 = 12$	$16 : 2 = 8$	$39 : 3 = 13$
$12 : 2 = 6$	$8 * 2 = 16$	$13 * 3 = 39$
$6 * 3 = 18$	$16 * 1 = 16$	$39 * 1 = 39$
$18 : 2 = 9$	$16 + 11 = 27$	$39 : 13 = 3$
$9 * 2 = 18$	$27 + 9 = 36$	$3 : 3 = 1$
$18 : 9 = 2$	$36 - 19 = 17$	$1 * 2 = 2$
$2 + 5 = 7$	$17 * 1 = 17$	$2 : 2 = 1$
$7 * 1 = 7$	$17 + 9 = 26$	$1 * 2 = 2$
$7 - 1 = 6$	$26 - 2 = 24$	$2 * 1 = 2$
$6 + 14 = 20$	$24 : 8 = 3$	$2 * 1 = 2$
$20 * 2 = 40$	$3 : 3 = 1$	$2 * 1 = 2$
$40 - 3 = 37$	$1 * 2 = 2$	$2 * 1 = 2$
$37 - 16 = 21$	$2 * 1 = 2$	$2 + 4 = 6$
$21 + 12 = 33$	$2 + 7 = 9$	$6 * 1 = 6$
$33 : 11 = 3$	$9 + 1 = 10$	$6 : 3 = 2$
$3 + 15 = 18$	$10 + 13 = 23$	$2 + 1 = 3$
	$1 + 15 = 16$	

## Kopfrechnen (15)

$11 + 19 = 30$	$2 + 1 = 3$	$5 : 5 = 1$
$30 - 12 = 18$	$3 * 3 = 9$	$1 * 1 = 1$
$18 - 14 = 4$	$9 * 1 = 9$	$1 * 1 = 1$
$4 * 2 = 8$	$9 * 3 = 27$	$1 + 3 = 4$
$8 - 6 = 2$	$27 * 3 = 81$	$4 * 2 = 8$
$2 * 2 = 4$	$81 + 6 = 87$	$8 + 18 = 26$
$4 * 1 = 4$	$87 : 3 = 29$	$26 + 12 = 38$
$4 + 3 = 7$	$29 + 4 = 33$	$38 - 12 = 26$
$7 : 7 = 1$	$33 * 2 = 66$	$26 * 2 = 52$
$1 + 20 = 21$	$66 : 11 = 6$	$52 + 15 = 67$
$21 : 7 = 3$	$6 : 3 = 2$	$67 - 3 = 64$
$3 + 10 = 13$	$2 + 15 = 17$	$64 * 2 = 128$
$13 + 12 = 25$	$17 - 2 = 15$	$128 + 20 = 148$
$25 : 5 = 5$	$15 + 5 = 20$	$148 + 1 = 149$
$5 * 1 = 5$	$20 - 5 = 15$	$149 + 14 = 163$
$5 + 11 = 16$	$15 * 1 = 15$	$163 - 5 = 158$
$16 : 8 = 2$	$15 * 3 = 45$	$158 + 2 = 160$
$2 + 13 = 15$	$45 - 11 = 34$	$160 - 6 = 154$
$15 + 7 = 22$	$34 - 10 = 24$	$154 + 19 = 173$
$22 + 5 = 27$	$24 + 9 = 33$	$173 * 2 = 346$
$27 - 17 = 10$	$33 - 12 = 21$	$346 * 2 = 692$
$10 * 2 = 20$	$21 * 1 = 21$	$692 : 2 = 346$
$20 + 18 = 38$	$21 - 18 = 3$	$346 + 19 = 365$
$38 : 2 = 19$	$3 * 2 = 6$	$365 - 6 = 359$
$19 * 3 = 57$	$6 : 2 = 3$	$359 - 10 = 349$
$57 * 1 = 57$	$3 + 18 = 21$	$349 + 10 = 359$
$57 * 1 = 57$	$21 - 9 = 12$	$359 + 18 = 377$
$57 - 20 = 37$	$12 * 3 = 36$	$377 + 20 = 397$
$37 + 5 = 42$	$36 * 2 = 72$	$397 * 1 = 397$
$42 : 3 = 14$	$72 * 3 = 216$	$397 * 2 = 794$
$14 : 2 = 7$	$216 - 19 = 197$	$794 : 2 = 397$
$7 + 20 = 27$	$197 - 4 = 193$	$397 * 3 = 1191$
$27 * 2 = 54$	$193 + 20 = 213$	$1191 + 10 = 1201$
$54 + 2 = 56$	$213 : 3 = 71$	$1201 - 3 = 1198$
$56 - 16 = 40$	$71 + 13 = 84$	$1198 + 5 = 1203$
$40 * 3 = 120$	$84 * 1 = 84$	$1203 * 3 = 3609$
$120 + 5 = 125$	$84 + 9 = 93$	$3609 - 10 = 3599$
$125 + 17 = 142$	$93 : 3 = 31$	
	$4 + 1 = 5$	

## Kopfrechnen (16)

$5 + 4 = 9$   
 $9 * 2 = 18$   
 $18 + 15 = 33$   
 $33 - 19 = 14$   
 $14 + 10 = 24$   
 $24 - 12 = 12$   
 $12 - 5 = 7$   
 $7 : 7 = 1$   
 $1 + 5 = 6$   
 $6 * 1 = 6$   
 $6 - 5 = 1$   
 $1 * 2 = 2$   
 $2 * 2 = 4$   
 $4 + 14 = 18$   
 $18 + 2 = 20$   
 $20 - 1 = 19$   
 $19 + 14 = 33$   
 $33 * 3 = 99$   
 $99 : 9 = 11$   
 $11 + 11 = 22$   
 $22 : 11 = 2$   
 $2 * 3 = 6$   
 $6 : 2 = 3$   
 $3 * 1 = 3$   
 $3 : 3 = 1$   
 $1 + 2 = 3$   
 $3 + 19 = 22$   
 $22 + 10 = 32$   
 $32 * 2 = 64$   
 $64 + 14 = 78$   
 $78 + 7 = 85$   
 $85 - 19 = 66$   
 $66 - 5 = 61$   
 $61 - 9 = 52$   
 $52 : 2 = 26$   
 $26 * 3 = 78$   
 $78 : 6 = 13$   
 $13 + 18 = 31$

$10 + 16 = 26$   
 $26 * 3 = 78$   
 $78 + 13 = 91$   
 $91 - 15 = 76$   
 $76 + 18 = 94$   
 $94 * 1 = 94$   
 $94 * 2 = 188$   
 $188 + 6 = 194$   
 $194 - 20 = 174$   
 $174 * 1 = 174$   
 $174 * 3 = 522$   
 $522 + 14 = 536$   
 $536 - 17 = 519$   
 $519 + 19 = 538$   
 $538 * 3 = 1614$   
 $1614 + 14 = 1628$   
 $1628 : 4 = 407$   
 $407 * 1 = 407$   
 $407 + 18 = 425$   
 $425 * 1 = 425$   
 $425 + 19 = 444$   
 $444 - 20 = 424$   
 $424 * 1 = 424$   
 $424 * 2 = 848$   
 $848 * 1 = 848$   
 $848 * 3 = 2544$   
 $2544 + 11 = 2555$   
 $2555 - 4 = 2551$   
 $2551 * 3 = 7653$   
 $7653 * 3 = 22959$   
 $22959 - 5 = 22954$   
 $22954 + 16 = 22970$   
 $22970 + 19 = 22989$   
 $22989 * 1 = 22989$   
 $22989 - 9 = 22980$   
 $22980 : 2 = 11490$   
 $11490 : 5 = 2298$   
 $2298 + 7 = 2305$   
 $7 + 18 = 25$

$25 - 8 = 17$   
 $17 + 15 = 32$   
 $32 * 1 = 32$   
 $32 - 5 = 27$   
 $27 - 6 = 21$   
 $21 + 19 = 40$   
 $40 : 4 = 10$   
 $10 : 10 = 1$   
 $1 * 1 = 1$   
 $1 * 1 = 1$   
 $1 * 3 = 3$   
 $3 + 11 = 14$   
 $14 + 7 = 21$   
 $21 * 3 = 63$   
 $63 + 12 = 75$   
 $75 + 16 = 91$   
 $91 - 12 = 79$   
 $79 - 20 = 59$   
 $59 - 17 = 42$   
 $42 : 6 = 7$   
 $7 + 10 = 17$   
 $17 - 5 = 12$   
 $12 * 1 = 12$   
 $12 + 8 = 20$   
 $20 + 7 = 27$   
 $27 - 4 = 23$   
 $23 * 3 = 69$   
 $69 + 11 = 80$   
 $80 * 2 = 160$   
 $160 - 4 = 156$   
 $156 + 9 = 165$   
 $165 - 1 = 164$   
 $164 + 20 = 184$   
 $184 - 13 = 171$   
 $171 + 8 = 179$   
 $179 - 17 = 162$   
 $162 - 17 = 145$



## Kopfrechnen (17)

$$\begin{aligned}3 + 20 &= 23 \\23 * 3 &= 69 \\69 : 3 &= 23 \\23 * 2 &= 46 \\46 * 1 &= 46 \\46 * 2 &= 92 \\92 - 2 &= 90 \\90 - 8 &= 82 \\82 * 2 &= 164 \\164 : 2 &= 82 \\82 * 1 &= 82 \\82 * 2 &= 164 \\164 + 16 &= 180 \\180 : 10 &= 18 \\18 : 9 &= 2 \\2 * 1 &= 2 \\2 * 2 &= 4 \\4 * 1 &= 4 \\4 : 2 &= 2 \\2 + 10 &= 12 \\12 : 6 &= 2 \\2 : 2 &= 1 \\1 - 1 &= 0 \\0 + 7 &= 7 \\7 + 2 &= 9 \\9 : 3 &= 3 \\3 + 5 &= 8 \\8 + 1 &= 9 \\9 - 6 &= 3 \\3 : 3 &= 1 \\1 + 4 &= 5 \\5 - 3 &= 2 \\2 : 2 &= 1 \\1 + 2 &= 3 \\3 : 3 &= 1 \\1 + 4 &= 5 \\5 * 2 &= 10 \\10 : 2 &= 5\end{aligned}$$

$$\begin{aligned}8 + 11 &= 19 \\19 - 14 &= 5 \\5 + 14 &= 19 \\19 + 13 &= 32 \\32 + 5 &= 37 \\37 * 1 &= 37 \\37 + 15 &= 52 \\52 : 13 &= 4 \\4 + 15 &= 19 \\19 - 17 &= 2 \\2 * 1 &= 2 \\2 + 4 &= 6 \\6 + 2 &= 8 \\8 : 2 &= 4 \\4 * 1 &= 4 \\4 + 18 &= 22 \\22 + 14 &= 36 \\36 - 10 &= 26 \\26 - 16 &= 10 \\10 : 5 &= 2 \\2 * 2 &= 4 \\4 : 2 &= 2 \\2 * 2 &= 4 \\4 + 15 &= 19 \\19 - 17 &= 2 \\2 + 1 &= 3 \\3 + 13 &= 16 \\16 * 3 &= 48 \\48 * 2 &= 96 \\96 : 3 &= 32 \\32 : 4 &= 8 \\8 : 4 &= 2 \\2 * 3 &= 6 \\6 : 6 &= 1 \\1 + 10 &= 11 \\11 + 17 &= 28 \\28 - 15 &= 13 \\13 * 1 &= 13 \\12 + 20 &= 32\end{aligned}$$

$$\begin{aligned}32 + 11 &= 43 \\43 + 5 &= 48 \\48 : 4 &= 12 \\12 * 1 &= 12 \\12 - 1 &= 11 \\11 * 2 &= 22 \\22 * 3 &= 66 \\66 + 13 &= 79 \\79 * 1 &= 79 \\79 - 1 &= 78 \\78 + 10 &= 88 \\88 : 8 &= 11 \\11 + 18 &= 29 \\29 - 3 &= 26 \\26 : 13 &= 2 \\2 + 19 &= 21 \\21 : 7 &= 3 \\3 * 2 &= 6 \\6 : 3 &= 2 \\2 * 2 &= 4 \\4 * 3 &= 12 \\12 - 6 &= 6 \\6 * 2 &= 12 \\12 : 4 &= 3 \\3 + 2 &= 5 \\5 * 3 &= 15 \\15 * 3 &= 45 \\45 * 1 &= 45 \\45 + 8 &= 53 \\53 + 17 &= 70 \\70 * 2 &= 140 \\140 * 3 &= 420 \\420 - 9 &= 411 \\411 + 9 &= 420 \\420 * 2 &= 840 \\840 + 16 &= 856 \\856 + 17 &= 873\end{aligned}$$

## Kopfrechnen (18)

$1 + 14 = 15$	$12 + 3 = 15$	$22 - 2 = 20$
$15 - 12 = 3$	$15 * 1 = 15$	$20 - 13 = 7$
$3 * 1 = 3$	$15 + 6 = 21$	$7 + 18 = 25$
$3 : 3 = 1$	$21 + 16 = 37$	$25 * 3 = 75$
$1 * 3 = 3$	$37 - 7 = 30$	$75 * 1 = 75$
$3 + 11 = 14$	$30 : 2 = 15$	$75 : 3 = 25$
$14 * 2 = 28$	$15 * 3 = 45$	$25 - 5 = 20$
$28 * 2 = 56$	$45 : 9 = 5$	$20 : 5 = 4$
$56 * 3 = 168$	$5 * 1 = 5$	$4 + 4 = 8$
$168 * 3 = 504$	$5 + 16 = 21$	$8 * 2 = 16$
$504 - 15 = 489$	$21 * 1 = 21$	$16 * 3 = 48$
$489 * 3 = 1467$	$21 : 7 = 3$	$48 : 6 = 8$
$1467 + 8 = 1475$	$3 * 2 = 6$	$8 * 3 = 24$
$1475 * 2 = 2950$	$6 : 2 = 3$	$24 * 2 = 48$
$2950 * 2 = 5900$	$3 * 1 = 3$	$48 - 14 = 34$
$5900 - 3 = 5897$	$3 : 3 = 1$	$34 * 2 = 68$
$5897 - 1 = 5896$	$1 + 12 = 13$	$68 : 4 = 17$
$5896 + 9 = 5905$	$13 : 13 = 1$	$17 * 2 = 34$
$5905 * 2 = 11810$	$1 + 1 = 2$	$34 : 2 = 17$
$11810 : 2 = 5905$	$2 : 2 = 1$	$17 * 1 = 17$
$5905 - 11 = 5894$	$1 + 8 = 9$	$17 * 1 = 17$
$5894 - 5 = 5889$	$9 + 4 = 13$	$17 * 3 = 51$
$5889 + 4 = 5893$	$13 + 10 = 23$	$51 : 3 = 17$
$5893 * 3 = 17679$	$23 + 19 = 42$	$17 - 5 = 12$
$17679 - 8 = 17671$	$42 + 5 = 47$	$12 : 2 = 6$
$17671 - 1 = 17670$	$47 + 16 = 63$	$6 * 3 = 18$
$17670 - 14 = 17656$	$63 + 14 = 77$	$18 : 2 = 9$
$17656 + 10 = 17666$	$77 - 14 = 63$	$9 + 18 = 27$
$17666 + 11 = 17677$	$63 - 3 = 60$	$27 * 1 = 27$
$17677 * 2 = 35354$	$60 + 5 = 65$	$27 * 2 = 54$
$35354 : 11 = 3214$	$65 - 12 = 53$	$54 - 8 = 46$
$3214 * 3 = 9642$	$53 + 17 = 70$	$46 + 2 = 48$
$9642 + 6 = 9648$	$70 * 3 = 210$	$48 + 14 = 62$
$9648 - 4 = 9644$	$210 : 7 = 30$	$62 - 8 = 54$
$9644 * 2 = 19288$	$30 - 14 = 16$	$54 : 9 = 6$
$19288 : 4 = 4822$	$16 * 1 = 16$	$6 : 2 = 3$
$4822 * 3 = 14466$	$16 - 1 = 15$	$3 * 1 = 3$
$14466 + 10 = 14476$	$15 + 4 = 19$	
	$6 + 16 = 22$	

## Kopfrechnen (19)

$4 + 17 = 21$	$3 + 1 = 4$	$9 : 9 = 1$
$21 : 3 = 7$	$4 : 2 = 2$	$1 + 4 = 5$
$7 - 5 = 2$	$2 + 11 = 13$	$5 * 2 = 10$
$2 + 8 = 10$	$13 + 6 = 19$	$10 * 3 = 30$
$10 * 2 = 20$	$19 + 11 = 30$	$30 * 3 = 90$
$20 * 1 = 20$	$30 * 3 = 90$	$90 - 7 = 83$
$20 : 10 = 2$	$90 * 2 = 180$	$83 - 12 = 71$
$2 + 2 = 4$	$180 : 5 = 36$	$71 + 15 = 86$
$4 + 20 = 24$	$36 + 12 = 48$	$86 * 3 = 258$
$24 + 13 = 37$	$48 - 20 = 28$	$258 + 15 = 273$
$37 - 16 = 21$	$28 + 2 = 30$	$273 * 2 = 546$
$21 - 10 = 11$	$30 + 16 = 46$	$546 * 1 = 546$
$11 + 12 = 23$	$46 + 7 = 53$	$546 * 1 = 546$
$23 + 2 = 25$	$53 - 16 = 37$	$546 - 3 = 543$
$25 + 11 = 36$	$37 * 3 = 111$	$543 * 3 = 1629$
$36 : 2 = 18$	$111 * 3 = 333$	$1629 + 16 = 1645$
$18 - 10 = 8$	$333 - 3 = 330$	$1645 - 2 = 1643$
$8 + 2 = 10$	$330 : 2 = 165$	$1643 - 17 = 1626$
$10 * 1 = 10$	$165 + 11 = 176$	$1626 * 1 = 1626$
$10 + 14 = 24$	$176 * 1 = 176$	$1626 - 10 = 1616$
$24 - 3 = 21$	$176 : 4 = 44$	$1616 + 6 = 1622$
$21 + 18 = 39$	$44 * 2 = 88$	$1622 * 2 = 3244$
$39 - 11 = 28$	$88 * 2 = 176$	$3244 * 1 = 3244$
$28 + 11 = 39$	$176 * 2 = 352$	$3244 + 1 = 3245$
$39 + 9 = 48$	$352 * 3 = 1056$	$3245 : 11 = 295$
$48 * 2 = 96$	$1056 * 3 = 3168$	$295 + 13 = 308$
$96 + 17 = 113$	$3168 * 2 = 6336$	$308 : 4 = 77$
$113 - 3 = 110$	$6336 : 4 = 1584$	$77 + 11 = 88$
$110 + 8 = 118$	$1584 * 2 = 3168$	$88 * 3 = 264$
$118 * 2 = 236$	$3168 : 12 = 264$	$264 * 3 = 792$
$236 - 10 = 226$	$264 + 16 = 280$	$792 - 7 = 785$
$226 - 13 = 213$	$280 * 3 = 840$	$785 + 9 = 794$
$213 + 8 = 221$	$840 : 6 = 140$	$794 + 5 = 799$
$221 * 2 = 442$	$140 * 2 = 280$	$799 + 13 = 812$
$442 + 3 = 445$	$280 + 8 = 288$	$812 + 6 = 818$
$445 - 13 = 432$	$288 - 17 = 271$	$818 + 16 = 834$
$432 - 15 = 417$	$271 * 2 = 542$	$834 : 6 = 139$
$417 + 19 = 436$	$542 - 7 = 535$	
	$4 + 5 = 9$	

## Kopfrechnen (20)

$5 + 5 = 10$	$5 + 7 = 12$	$2 * 2 = 4$
$10 * 1 = 10$	$12 : 12 = 1$	$4 * 1 = 4$
$10 * 1 = 10$	$1 + 3 = 4$	$4 + 16 = 20$
$10 * 1 = 10$	$4 + 20 = 24$	$20 * 1 = 20$
$10 + 16 = 26$	$24 : 12 = 2$	$20 * 2 = 40$
$26 * 2 = 52$	$2 - 1 = 1$	$40 * 2 = 80$
$52 - 1 = 51$	$1 + 6 = 7$	$80 : 8 = 10$
$51 * 1 = 51$	$7 : 7 = 1$	$10 * 1 = 10$
$51 : 3 = 17$	$1 + 20 = 21$	$10 - 2 = 8$
$17 + 6 = 23$	$21 - 14 = 7$	$8 * 2 = 16$
$23 * 1 = 23$	$7 + 20 = 27$	$16 - 15 = 1$
$23 - 1 = 22$	$27 : 3 = 9$	$1 + 19 = 20$
$22 : 2 = 11$	$9 : 9 = 1$	$20 * 3 = 60$
$11 - 1 = 10$	$1 * 2 = 2$	$60 + 6 = 66$
$10 : 2 = 5$	$2 + 5 = 7$	$66 * 1 = 66$
$5 * 3 = 15$	$7 * 2 = 14$	$66 : 2 = 33$
$15 * 2 = 30$	$14 * 3 = 42$	$33 * 3 = 99$
$30 + 19 = 49$	$42 * 3 = 126$	$99 - 2 = 97$
$49 + 12 = 61$	$126 * 1 = 126$	$97 + 15 = 112$
$61 - 9 = 52$	$126 : 9 = 14$	$112 + 13 = 125$
$52 * 1 = 52$	$14 * 2 = 28$	$125 - 16 = 109$
$52 - 5 = 47$	$28 : 4 = 7$	$109 - 16 = 93$
$47 * 2 = 94$	$7 + 16 = 23$	$93 : 3 = 31$
$94 * 1 = 94$	$23 * 1 = 23$	$31 - 9 = 22$
$94 + 6 = 100$	$23 * 2 = 46$	$22 : 11 = 2$
$100 * 2 = 200$	$46 : 2 = 23$	$2 * 2 = 4$
$200 - 5 = 195$	$23 + 3 = 26$	$4 - 4 = 0$
$195 - 14 = 181$	$26 + 18 = 44$	$0 + 7 = 7$
$181 - 10 = 171$	$44 - 10 = 34$	$7 * 3 = 21$
$171 * 1 = 171$	$34 - 11 = 23$	$21 - 17 = 4$
$171 + 7 = 178$	$23 + 11 = 34$	$4 : 2 = 2$
$178 : 2 = 89$	$34 * 2 = 68$	$2 * 3 = 6$
$89 - 11 = 78$	$68 + 16 = 84$	$6 : 6 = 1$
$78 * 2 = 156$	$84 - 7 = 77$	$1 + 13 = 14$
$156 + 12 = 168$	$77 - 9 = 68$	$14 * 2 = 28$
$168 : 12 = 14$	$68 - 10 = 58$	$28 - 10 = 18$
$14 : 7 = 2$	$58 + 4 = 62$	$18 - 5 = 13$
$2 + 6 = 8$	$62 * 1 = 62$	
	$1 + 1 = 2$	

## Kopfrechnen (21)

$1 + 19 = 20$

$20 * 2 = 40$

$40 : 2 = 20$

$20 + 15 = 35$

$35 * 2 = 70$

$70 * 2 = 140$

$140 - 3 = 137$

$137 * 2 = 274$

$274 * 1 = 274$

$274 + 9 = 283$

$283 - 11 = 272$

$272 : 8 = 34$

$34 - 17 = 17$

$17 + 14 = 31$

$31 * 1 = 31$

$31 + 5 = 36$

$36 + 4 = 40$

$40 - 19 = 21$

$21 * 1 = 21$

$21 - 19 = 2$

$2 - 1 = 1$

$1 * 3 = 3$

$3 + 12 = 15$

$15 : 3 = 5$

$5 + 18 = 23$

$23 + 7 = 30$

$30 * 3 = 90$

$90 * 1 = 90$

$90 - 15 = 75$

$75 : 5 = 15$

$15 + 16 = 31$

$31 - 19 = 12$

$12 * 1 = 12$

$12 + 12 = 24$

$24 + 11 = 35$

$35 + 8 = 43$

$43 + 14 = 57$

$57 + 14 = 71$

$7 + 8 = 15$

$15 + 20 = 35$

$35 + 11 = 46$

$46 * 3 = 138$

$138 - 11 = 127$

$127 + 9 = 136$

$136 - 6 = 130$

$130 * 3 = 390$

$390 + 17 = 407$

$407 * 1 = 407$

$407 - 3 = 404$

$404 - 12 = 392$

$392 * 3 = 1176$

$1176 * 3 = 3528$

$3528 + 7 = 3535$

$3535 - 1 = 3534$

$3534 : 2 = 1767$

$1767 * 3 = 5301$

$5301 * 1 = 5301$

$5301 * 1 = 5301$

$5301 + 5 = 5306$

$5306 * 2 = 10612$

$10612 - 20 = 10592$

$10592 * 3 = 31776$

$31776 : 2 = 15888$

$15888 - 2 = 15886$

$15886 : 2 = 7943$

$7943 - 2 = 7941$

$7941 * 3 = 23823$

$23823 - 14 = 23809$

$23809 + 14 = 23823$

$23823 - 10 = 23813$

$23813 + 8 = 23821$

$23821 * 3 = 71463$

$71463 * 2 = 142926$

$142926 * 1 = 142926$

$142926 : 3 = 47642$

$47642 - 5 = 47637$

$11 + 15 = 26$

$26 * 1 = 26$

$26 + 15 = 41$

$41 + 7 = 48$

$48 - 20 = 28$

$28 : 2 = 14$

$14 - 12 = 2$

$2 + 16 = 18$

$18 - 1 = 17$

$17 - 8 = 9$

$9 * 2 = 18$

$18 - 10 = 8$

$8 + 6 = 14$

$14 : 2 = 7$

$7 * 1 = 7$

$7 + 13 = 20$

$20 * 3 = 60$

$60 - 16 = 44$

$44 + 5 = 49$

$49 - 15 = 34$

$34 + 12 = 46$

$46 * 1 = 46$

$46 - 10 = 36$

$36 + 2 = 38$

$38 + 16 = 54$

$54 * 3 = 162$

$162 + 1 = 163$

$163 - 16 = 147$

$147 : 7 = 21$

$21 - 16 = 5$

$5 : 5 = 1$

$1 + 2 = 3$

$3 + 16 = 19$

$19 * 3 = 57$

$57 + 17 = 74$

$74 * 1 = 74$

$74 - 19 = 55$

$55 + 1 = 56$

## Kopfrechnen (22)

$10 + 6 = 16$

$16 + 7 = 23$

$23 - 5 = 18$

$18 + 17 = 35$

$35 : 5 = 7$

$7 : 7 = 1$

$1 * 2 = 2$

$2 : 2 = 1$

$1 + 13 = 14$

$14 : 2 = 7$

$7 * 2 = 14$

$14 : 2 = 7$

$7 : 7 = 1$

$1 * 3 = 3$

$3 + 14 = 17$

$17 + 8 = 25$

$25 * 2 = 50$

$50 : 10 = 5$

$5 + 7 = 12$

$12 : 2 = 6$

$6 - 2 = 4$

$4 : 2 = 2$

$2 : 2 = 1$

$1 - 1 = 0$

$0 + 7 = 7$

$7 + 5 = 12$

$12 + 2 = 14$

$14 - 13 = 1$

$1 * 1 = 1$

$1 * 3 = 3$

$3 * 1 = 3$

$3 + 8 = 11$

$11 + 14 = 25$

$25 - 17 = 8$

$8 - 8 = 0$

$0 + 2 = 2$

$2 * 3 = 6$

$6 + 17 = 23$

$3 + 6 = 9$

$9 - 9 = 0$

$0 + 15 = 15$

$15 * 1 = 15$

$15 * 1 = 15$

$15 * 3 = 45$

$45 + 1 = 46$

$46 - 19 = 27$

$27 + 6 = 33$

$33 * 1 = 33$

$33 + 16 = 49$

$49 : 7 = 7$

$7 + 3 = 10$

$10 + 6 = 16$

$16 * 3 = 48$

$48 * 3 = 144$

$144 + 15 = 159$

$159 + 17 = 176$

$176 - 13 = 163$

$163 - 3 = 160$

$160 * 1 = 160$

$160 * 1 = 160$

$160 + 12 = 172$

$172 - 9 = 163$

$163 * 3 = 489$

$489 - 14 = 475$

$475 + 20 = 495$

$495 + 18 = 513$

$513 + 9 = 522$

$522 * 3 = 1566$

$1566 * 3 = 4698$

$4698 + 2 = 4700$

$4700 : 5 = 940$

$940 + 10 = 950$

$950 + 20 = 970$

$970 + 8 = 978$

$978 + 2 = 980$

$980 * 1 = 980$

$8 + 8 = 16$

$16 : 4 = 4$

$4 - 3 = 1$

$1 + 15 = 16$

$16 - 14 = 2$

$2 * 1 = 2$

$2 : 2 = 1$

$1 * 2 = 2$

$2 - 1 = 1$

$1 + 18 = 19$

$19 + 15 = 34$

$34 : 2 = 17$

$17 * 1 = 17$

$17 + 18 = 35$

$35 * 1 = 35$

$35 * 1 = 35$

$35 + 4 = 39$

$39 - 6 = 33$

$33 * 3 = 99$

$99 - 6 = 93$

$93 : 3 = 31$

$31 - 18 = 13$

$13 : 13 = 1$

$1 + 16 = 17$

$17 - 10 = 7$

$7 - 6 = 1$

$1 * 2 = 2$

$2 + 17 = 19$

$19 * 3 = 57$

$57 * 3 = 171$

$171 - 3 = 168$

$168 : 8 = 21$

$21 * 1 = 21$

$21 - 17 = 4$

$4 + 18 = 22$

$22 - 6 = 16$

$16 * 2 = 32$

$32 * 2 = 64$

## Kopfrechnen (23)

$1 + 20 = 21$

$21 + 7 = 28$

$28 * 1 = 28$

$28 : 2 = 14$

$14 * 1 = 14$

$14 * 1 = 14$

$14 + 20 = 34$

$34 - 3 = 31$

$31 * 2 = 62$

$62 * 2 = 124$

$124 : 2 = 62$

$62 + 16 = 78$

$78 + 19 = 97$

$97 + 15 = 112$

$112 * 3 = 336$

$336 - 8 = 328$

$328 * 2 = 656$

$656 : 8 = 82$

$82 - 13 = 69$

$69 * 1 = 69$

$69 : 3 = 23$

$23 - 11 = 12$

$12 + 18 = 30$

$30 + 18 = 48$

$48 : 3 = 16$

$16 * 1 = 16$

$16 + 15 = 31$

$31 * 2 = 62$

$62 * 3 = 186$

$186 : 6 = 31$

$31 - 8 = 23$

$23 * 2 = 46$

$46 * 3 = 138$

$138 * 2 = 276$

$276 - 19 = 257$

$257 * 2 = 514$

$514 : 2 = 257$

$257 + 14 = 271$

$3 + 13 = 16$

$16 : 8 = 2$

$2 * 1 = 2$

$2 + 10 = 12$

$12 + 20 = 32$

$32 + 17 = 49$

$49 + 15 = 64$

$64 - 3 = 61$

$61 + 19 = 80$

$80 : 8 = 10$

$10 * 2 = 20$

$20 - 13 = 7$

$7 * 2 = 14$

$14 + 9 = 23$

$23 - 1 = 22$

$22 + 12 = 34$

$34 * 2 = 68$

$68 - 2 = 66$

$66 * 3 = 198$

$198 : 6 = 33$

$33 - 2 = 31$

$31 - 2 = 29$

$29 + 13 = 42$

$42 * 3 = 126$

$126 * 2 = 252$

$252 - 4 = 248$

$248 * 2 = 496$

$496 : 2 = 248$

$248 : 2 = 124$

$124 - 10 = 114$

$114 : 2 = 57$

$57 - 5 = 52$

$52 - 4 = 48$

$48 : 6 = 8$

$8 * 1 = 8$

$8 * 3 = 24$

$24 - 12 = 12$

$12 + 11 = 23$

$4 + 3 = 7$

$7 * 1 = 7$

$7 * 1 = 7$

$7 + 11 = 18$

$18 + 3 = 21$

$21 - 4 = 17$

$17 + 3 = 20$

$20 + 7 = 27$

$27 * 1 = 27$

$27 - 9 = 18$

$18 : 2 = 9$

$9 * 2 = 18$

$18 + 4 = 22$

$22 * 3 = 66$

$66 * 3 = 198$

$198 * 3 = 594$

$594 : 3 = 198$

$198 * 1 = 198$

$198 + 6 = 204$

$204 * 3 = 612$

$612 * 1 = 612$

$612 * 3 = 1836$

$1836 - 16 = 1820$

$1820 + 9 = 1829$

$1829 + 17 = 1846$

$1846 - 3 = 1843$

$1843 - 15 = 1828$

$1828 + 18 = 1846$

$1846 - 15 = 1831$

$1831 * 1 = 1831$

$1831 + 16 = 1847$

$1847 * 3 = 5541$

$5541 + 14 = 5555$

$5555 - 8 = 5547$

$5547 - 11 = 5536$

$5536 : 8 = 692$

$692 + 4 = 696$

$696 - 1 = 695$

## Kopfrechnen (24)

$$\begin{aligned}6 + 4 &= 10 \\10 * 3 &= 30 \\30 + 19 &= 49 \\49 : 7 &= 7 \\7 * 1 &= 7 \\7 - 7 &= 0 \\0 + 14 &= 14 \\14 - 6 &= 8 \\8 + 12 &= 20 \\20 * 2 &= 40 \\40 + 13 &= 53 \\53 - 4 &= 49 \\49 - 4 &= 45 \\45 : 9 &= 5 \\5 + 11 &= 16 \\16 + 4 &= 20 \\20 : 4 &= 5 \\5 * 1 &= 5 \\5 : 5 &= 1 \\1 * 3 &= 3 \\3 + 1 &= 4 \\4 : 2 &= 2 \\2 * 2 &= 4 \\4 + 20 &= 24 \\24 + 13 &= 37 \\37 + 4 &= 41 \\41 + 10 &= 51 \\51 : 3 &= 17 \\17 * 3 &= 51 \\51 - 19 &= 32 \\32 + 10 &= 42 \\42 * 3 &= 126 \\126 - 4 &= 122 \\122 * 3 &= 366 \\366 + 10 &= 376 \\376 : 2 &= 188 \\188 : 4 &= 47 \\47 * 2 &= 94\end{aligned}$$

$$\begin{aligned}10 + 7 &= 17 \\17 + 18 &= 35 \\35 : 5 &= 7 \\7 * 2 &= 14 \\14 + 20 &= 34 \\34 - 12 &= 22 \\22 + 16 &= 38 \\38 * 2 &= 76 \\76 * 1 &= 76 \\76 - 17 &= 59 \\59 - 9 &= 50 \\50 : 10 &= 5 \\5 + 13 &= 18 \\18 * 2 &= 36 \\36 * 3 &= 108 \\108 + 16 &= 124 \\124 : 4 &= 31 \\31 * 1 &= 31 \\31 * 1 &= 31 \\31 + 2 &= 33 \\33 + 16 &= 49 \\49 - 2 &= 47 \\47 + 17 &= 64 \\64 + 15 &= 79 \\79 * 2 &= 158 \\158 - 16 &= 142 \\142 : 2 &= 71 \\71 * 1 &= 71 \\71 + 10 &= 81 \\81 * 3 &= 243 \\243 - 13 &= 230 \\230 * 2 &= 460 \\460 : 4 &= 115 \\115 * 2 &= 230 \\230 * 3 &= 690 \\690 - 18 &= 672 \\672 + 11 &= 683 \\683 + 18 &= 701 \\6 + 9 &= 15\end{aligned}$$

$$\begin{aligned}15 : 3 &= 5 \\5 * 2 &= 10 \\10 * 3 &= 30 \\30 * 3 &= 90 \\90 : 10 &= 9 \\9 : 3 &= 3 \\3 + 10 &= 13 \\13 + 14 &= 27 \\27 - 1 &= 26 \\26 : 2 &= 13 \\13 : 13 &= 1 \\1 * 3 &= 3 \\3 + 19 &= 22 \\22 + 11 &= 33 \\33 - 6 &= 27 \\27 + 10 &= 37 \\37 - 19 &= 18 \\18 : 6 &= 3 \\3 + 5 &= 8 \\8 * 3 &= 24 \\24 - 13 &= 11 \\11 * 1 &= 11 \\11 + 6 &= 17 \\17 - 8 &= 9 \\9 + 19 &= 28 \\28 - 16 &= 12 \\12 : 6 &= 2 \\2 - 1 &= 1 \\1 + 13 &= 14 \\14 : 7 &= 2 \\2 * 3 &= 6 \\6 + 16 &= 22 \\22 + 2 &= 24 \\24 : 6 &= 4 \\4 * 2 &= 8 \\8 * 3 &= 24 \\24 : 2 &= 12\end{aligned}$$



## Kopfrechnen (25)

$12 + 4 = 16$	$6 + 17 = 23$	$7 : 7 = 1$
$16 + 9 = 25$	$23 * 1 = 23$	$1 + 7 = 8$
$25 - 18 = 7$	$23 * 2 = 46$	$8 + 9 = 17$
$7 + 8 = 15$	$46 : 2 = 23$	$17 + 10 = 27$
$15 * 3 = 45$	$23 * 2 = 46$	$27 * 3 = 81$
$45 * 2 = 90$	$46 - 17 = 29$	$81 + 19 = 100$
$90 * 1 = 90$	$29 * 1 = 29$	$100 * 2 = 200$
$90 - 12 = 78$	$29 + 4 = 33$	$200 + 15 = 215$
$78 * 2 = 156$	$33 : 11 = 3$	$215 + 16 = 231$
$156 + 18 = 174$	$3 - 3 = 0$	$231 + 3 = 234$
$174 + 12 = 186$	$0 + 20 = 20$	$234 + 5 = 239$
$186 - 19 = 167$	$20 - 10 = 10$	$239 - 13 = 226$
$167 + 5 = 172$	$10 * 2 = 20$	$226 - 7 = 219$
$172 : 2 = 86$	$20 : 5 = 4$	$219 - 8 = 211$
$86 : 2 = 43$	$4 + 3 = 7$	$211 - 16 = 195$
$43 + 7 = 50$	$7 * 2 = 14$	$195 * 3 = 585$
$50 * 3 = 150$	$14 + 18 = 32$	$585 - 18 = 567$
$150 : 6 = 25$	$32 * 2 = 64$	$567 - 17 = 550$
$25 - 17 = 8$	$64 : 8 = 8$	$550 * 2 = 1100$
$8 : 2 = 4$	$8 + 4 = 12$	$1100 + 18 = 1118$
$4 + 18 = 22$	$12 + 10 = 22$	$1118 * 3 = 3354$
$22 - 9 = 13$	$22 : 11 = 2$	$3354 + 3 = 3357$
$13 * 2 = 26$	$2 : 2 = 1$	$3357 + 9 = 3366$
$26 + 1 = 27$	$1 + 18 = 19$	$3366 + 4 = 3370$
$27 - 14 = 13$	$19 + 12 = 31$	$3370 - 2 = 3368$
$13 * 1 = 13$	$31 + 12 = 43$	$3368 : 8 = 421$
$13 * 3 = 39$	$43 - 19 = 24$	$421 * 1 = 421$
$39 : 3 = 13$	$24 - 6 = 18$	$421 - 10 = 411$
$13 * 2 = 26$	$18 + 13 = 31$	$411 : 3 = 137$
$26 : 2 = 13$	$31 + 9 = 40$	$137 * 2 = 274$
$13 : 13 = 1$	$40 + 10 = 50$	$274 + 16 = 290$
$1 + 19 = 20$	$50 * 2 = 100$	$290 : 5 = 58$
$20 : 5 = 4$	$100 + 5 = 105$	$58 - 7 = 51$
$4 + 4 = 8$	$105 - 10 = 95$	$51 * 2 = 102$
$8 * 2 = 16$	$95 + 15 = 110$	$102 - 2 = 100$
$16 : 8 = 2$	$110 + 20 = 130$	$100 * 2 = 200$
$2 : 2 = 1$	$130 : 2 = 65$	$200 - 3 = 197$
$1 * 2 = 2$	$65 + 14 = 79$	
	$3 + 4 = 7$	

## Kopfrechnen (26)

$7 + 8 = 15$	$12 + 8 = 20$	$22 + 14 = 36$
$15 : 3 = 5$	$20 - 9 = 11$	$36 * 1 = 36$
$5 * 2 = 10$	$11 + 3 = 14$	$36 - 10 = 26$
$10 : 5 = 2$	$14 + 17 = 31$	$26 * 3 = 78$
$2 * 1 = 2$	$31 - 17 = 14$	$78 - 4 = 74$
$2 * 3 = 6$	$14 + 2 = 16$	$74 - 2 = 72$
$6 * 1 = 6$	$16 : 8 = 2$	$72 + 11 = 83$
$6 + 1 = 7$	$2 + 17 = 19$	$83 + 17 = 100$
$7 * 3 = 21$	$19 + 7 = 26$	$100 * 1 = 100$
$21 - 6 = 15$	$26 : 2 = 13$	$100 + 17 = 117$
$15 : 5 = 3$	$13 : 13 = 1$	$117 * 3 = 351$
$3 : 3 = 1$	$1 + 7 = 8$	$351 - 20 = 331$
$1 + 12 = 13$	$8 : 2 = 4$	$331 * 1 = 331$
$13 * 2 = 26$	$4 + 4 = 8$	$331 - 12 = 319$
$26 * 1 = 26$	$8 + 1 = 9$	$319 * 3 = 957$
$26 - 2 = 24$	$9 * 2 = 18$	$957 + 2 = 959$
$24 + 12 = 36$	$18 : 2 = 9$	$959 - 17 = 942$
$36 : 12 = 3$	$9 : 9 = 1$	$942 : 2 = 471$
$3 : 3 = 1$	$1 * 3 = 3$	$471 * 1 = 471$
$1 * 1 = 1$	$3 : 3 = 1$	$471 - 10 = 461$
$1 * 1 = 1$	$1 + 2 = 3$	$461 * 2 = 922$
$1 * 1 = 1$	$3 * 3 = 9$	$922 + 11 = 933$
$1 * 1 = 1$	$9 - 8 = 1$	$933 - 13 = 920$
$1 * 1 = 1$	$1 * 2 = 2$	$920 : 2 = 460$
$1 * 1 = 1$	$2 + 18 = 20$	$460 * 3 = 1380$
$1 * 3 = 3$	$20 * 2 = 40$	$1380 * 1 = 1380$
$3 * 1 = 3$	$40 * 1 = 40$	$1380 + 8 = 1388$
$3 + 2 = 5$	$40 - 14 = 26$	$1388 * 3 = 4164$
$5 * 2 = 10$	$26 : 2 = 13$	$4164 - 20 = 4144$
$10 * 1 = 10$	$13 + 14 = 27$	$4144 * 2 = 8288$
$10 + 3 = 13$	$27 + 14 = 41$	$8288 * 2 = 16576$
$13 * 1 = 13$	$41 * 2 = 82$	$16576 * 1 = 16576$
$13 + 4 = 17$	$82 * 2 = 164$	$16576 - 13 = 16563$
$17 + 13 = 30$	$164 : 4 = 41$	$16563 * 1 = 16563$
$30 * 2 = 60$	$41 + 6 = 47$	$16563 - 2 = 16561$
$60 - 4 = 56$	$47 * 2 = 94$	$16561 + 6 = 16567$
$56 : 2 = 28$	$94 * 3 = 282$	$16567 - 7 = 16560$
$28 - 19 = 9$	$282 + 19 = 301$	
$9 + 20 = 29$	$2 + 20 = 22$	

## Kopfrechnen (27)

$9 + 8 = 17$   
 $17 + 13 = 30$   
 $30 + 3 = 33$   
 $33 - 8 = 25$   
 $25 + 8 = 33$   
 $33 * 2 = 66$   
 $66 + 6 = 72$   
 $72 - 6 = 66$   
 $66 : 6 = 11$   
 $11 : 11 = 1$   
 $1 + 10 = 11$   
 $11 * 2 = 22$   
 $22 + 1 = 23$   
 $23 - 11 = 12$   
 $12 + 19 = 31$   
 $31 * 1 = 31$   
 $31 + 2 = 33$   
 $33 : 11 = 3$   
 $3 + 2 = 5$   
 $5 * 3 = 15$   
 $15 + 14 = 29$   
 $29 - 15 = 14$   
 $14 * 1 = 14$   
 $14 : 7 = 2$   
 $2 : 2 = 1$   
 $1 + 2 = 3$   
 $3 : 3 = 1$   
 $1 + 16 = 17$   
 $17 - 17 = 0$   
 $0 + 1 = 1$   
 $1 + 14 = 15$   
 $15 : 5 = 3$   
 $3 + 14 = 17$   
 $17 + 3 = 20$   
 $20 + 18 = 38$   
 $38 * 1 = 38$   
 $38 + 13 = 51$   
 $51 + 2 = 53$

$4 + 3 = 7$   
 $7 + 4 = 11$   
 $11 * 3 = 33$   
 $33 : 11 = 3$   
 $3 : 3 = 1$   
 $1 + 16 = 17$   
 $17 + 13 = 30$   
 $30 - 13 = 17$   
 $17 + 7 = 24$   
 $24 * 1 = 24$   
 $24 - 15 = 9$   
 $9 + 14 = 23$   
 $23 + 7 = 30$   
 $30 - 3 = 27$   
 $27 * 3 = 81$   
 $81 * 3 = 243$   
 $243 + 19 = 262$   
 $262 * 2 = 524$   
 $524 + 16 = 540$   
 $540 + 2 = 542$   
 $542 * 1 = 542$   
 $542 * 1 = 542$   
 $542 : 2 = 271$   
 $271 + 6 = 277$   
 $277 + 3 = 280$   
 $280 + 14 = 294$   
 $294 : 2 = 147$   
 $147 + 3 = 150$   
 $150 * 1 = 150$   
 $150 * 1 = 150$   
 $150 : 3 = 50$   
 $50 - 15 = 35$   
 $35 + 17 = 52$   
 $52 : 4 = 13$   
 $13 - 11 = 2$   
 $2 * 2 = 4$   
 $4 : 2 = 2$   
 $2 + 4 = 6$   
 $2 + 9 = 11$

$11 - 8 = 3$   
 $3 * 3 = 9$   
 $9 * 2 = 18$   
 $18 + 16 = 34$   
 $34 - 16 = 18$   
 $18 : 6 = 3$   
 $3 * 1 = 3$   
 $3 : 3 = 1$   
 $1 * 3 = 3$   
 $3 * 2 = 6$   
 $6 - 5 = 1$   
 $1 * 3 = 3$   
 $3 * 2 = 6$   
 $6 : 3 = 2$   
 $2 + 14 = 16$   
 $16 : 2 = 8$   
 $8 : 2 = 4$   
 $4 : 4 = 1$   
 $1 * 2 = 2$   
 $2 * 2 = 4$   
 $4 : 4 = 1$   
 $1 * 1 = 1$   
 $1 * 1 = 1$   
 $1 * 2 = 2$   
 $2 + 10 = 12$   
 $12 + 10 = 22$   
 $22 + 11 = 33$   
 $33 + 15 = 48$   
 $48 : 2 = 24$   
 $24 - 7 = 17$   
 $17 * 1 = 17$   
 $17 * 2 = 34$   
 $34 * 3 = 102$   
 $102 + 19 = 121$   
 $121 * 3 = 363$   
 $363 - 11 = 352$   
 $352 : 8 = 44$

## Kopfrechnen (28)

$3 + 17 = 20$	$12 + 17 = 29$	$10 + 4 = 14$
$20 + 4 = 24$	$29 + 5 = 34$	$14 * 2 = 28$
$24 * 3 = 72$	$34 * 1 = 34$	$28 * 3 = 84$
$72 : 4 = 18$	$34 * 1 = 34$	$84 - 14 = 70$
$18 * 1 = 18$	$34 - 16 = 18$	$70 * 2 = 140$
$18 + 19 = 37$	$18 + 11 = 29$	$140 * 2 = 280$
$37 + 4 = 41$	$29 - 12 = 17$	$280 : 2 = 140$
$41 + 2 = 43$	$17 + 17 = 34$	$140 * 1 = 140$
$43 - 9 = 34$	$34 * 2 = 68$	$140 - 2 = 138$
$34 + 8 = 42$	$68 + 10 = 78$	$138 + 14 = 152$
$42 * 3 = 126$	$78 * 1 = 78$	$152 * 1 = 152$
$126 - 11 = 115$	$78 + 4 = 82$	$152 - 6 = 146$
$115 - 2 = 113$	$82 - 16 = 66$	$146 - 5 = 141$
$113 * 3 = 339$	$66 * 2 = 132$	$141 * 1 = 141$
$339 : 3 = 113$	$132 : 3 = 44$	$141 * 1 = 141$
$113 + 9 = 122$	$44 : 11 = 4$	$141 : 3 = 47$
$122 : 2 = 61$	$4 * 2 = 8$	$47 * 2 = 94$
$61 - 9 = 52$	$8 * 3 = 24$	$94 - 19 = 75$
$52 * 1 = 52$	$24 * 3 = 72$	$75 + 1 = 76$
$52 + 7 = 59$	$72 * 3 = 216$	$76 : 4 = 19$
$59 * 3 = 177$	$216 * 1 = 216$	$19 - 10 = 9$
$177 + 15 = 192$	$216 * 2 = 432$	$9 * 2 = 18$
$192 - 16 = 176$	$432 * 3 = 1296$	$18 + 17 = 35$
$176 * 3 = 528$	$1296 - 10 = 1286$	$35 : 5 = 7$
$528 * 2 = 1056$	$1286 * 1 = 1286$	$7 + 13 = 20$
$1056 + 11 = 1067$	$1286 + 19 = 1305$	$20 : 5 = 4$
$1067 - 20 = 1047$	$1305 + 20 = 1325$	$4 : 2 = 2$
$1047 * 2 = 2094$	$1325 : 5 = 265$	$2 : 2 = 1$
$2094 - 17 = 2077$	$265 * 1 = 265$	$1 + 4 = 5$
$2077 * 3 = 6231$	$265 : 5 = 53$	$5 : 5 = 1$
$6231 - 6 = 6225$	$53 + 14 = 67$	$1 + 19 = 20$
$6225 * 1 = 6225$	$67 + 2 = 69$	$20 + 3 = 23$
$6225 * 2 = 12450$	$69 + 1 = 70$	$23 + 20 = 43$
$12450 * 1 = 12450$	$70 + 8 = 78$	$43 - 11 = 32$
$12450 : 3 = 4150$	$78 + 19 = 97$	$32 : 8 = 4$
$4150 * 3 = 12450$	$97 - 13 = 84$	$4 : 4 = 1$
$12450 - 7 = 12443$	$84 * 3 = 252$	$1 + 19 = 20$
$12443 - 5 = 12438$	$252 - 18 = 234$	
	$4 + 6 = 10$	

## Kopfrechnen (29)

$8 + 3 = 11$	$1 + 3 = 4$	$22 * 3 = 66$
$11 + 11 = 22$	$4 * 1 = 4$	$66 * 2 = 132$
$22 + 11 = 33$	$4 + 11 = 15$	$132 : 12 = 11$
$33 - 12 = 21$	$15 - 11 = 4$	$11 * 2 = 22$
$21 - 9 = 12$	$4 : 4 = 1$	$22 - 1 = 21$
$12 + 9 = 21$	$1 + 13 = 14$	$21 - 20 = 1$
$21 - 12 = 9$	$14 * 3 = 42$	$1 * 1 = 1$
$9 : 9 = 1$	$42 + 6 = 48$	$1 + 7 = 8$
$1 + 13 = 14$	$48 - 1 = 47$	$8 * 3 = 24$
$14 + 3 = 17$	$47 * 3 = 141$	$24 - 6 = 18$
$17 - 16 = 1$	$141 * 3 = 423$	$18 : 3 = 6$
$1 * 3 = 3$	$423 : 3 = 141$	$6 : 6 = 1$
$3 * 3 = 9$	$141 * 1 = 141$	$1 + 11 = 12$
$9 + 6 = 15$	$141 * 1 = 141$	$12 : 2 = 6$
$15 * 1 = 15$	$141 - 11 = 130$	$6 : 3 = 2$
$15 : 3 = 5$	$130 * 3 = 390$	$2 + 9 = 11$
$5 : 5 = 1$	$390 : 5 = 78$	$11 + 5 = 16$
$1 - 1 = 0$	$78 : 2 = 39$	$16 - 11 = 5$
$0 + 11 = 11$	$39 : 3 = 13$	$5 * 1 = 5$
$11 - 3 = 8$	$13 + 12 = 25$	$5 * 1 = 5$
$8 : 2 = 4$	$25 : 5 = 5$	$5 + 12 = 17$
$4 * 1 = 4$	$5 - 4 = 1$	$17 + 7 = 24$
$4 + 8 = 12$	$1 - 1 = 0$	$24 : 8 = 3$
$12 : 2 = 6$	$0 + 9 = 9$	$3 : 3 = 1$
$6 - 6 = 0$	$9 * 3 = 27$	$1 + 2 = 3$
$0 + 5 = 5$	$27 - 13 = 14$	$3 + 14 = 17$
$5 : 5 = 1$	$14 * 2 = 28$	$17 * 1 = 17$
$1 + 18 = 19$	$28 : 4 = 7$	$17 + 12 = 29$
$19 * 2 = 38$	$7 + 20 = 27$	$29 + 8 = 37$
$38 - 18 = 20$	$27 + 3 = 30$	$37 + 6 = 43$
$20 * 3 = 60$	$30 - 10 = 20$	$43 + 1 = 44$
$60 - 11 = 49$	$20 * 2 = 40$	$44 - 13 = 31$
$49 * 1 = 49$	$40 + 3 = 43$	$31 - 5 = 26$
$49 * 3 = 147$	$43 - 15 = 28$	$26 : 2 = 13$
$147 + 9 = 156$	$28 : 4 = 7$	$13 : 13 = 1$
$156 : 2 = 78$	$7 + 3 = 10$	$1 - 1 = 0$
$78 : 6 = 13$	$10 * 3 = 30$	$0 + 18 = 18$
$13 : 13 = 1$	$30 - 16 = 14$	
	$12 + 10 = 22$	

## Kopfrechnen (30)

$1 + 13 = 14$

$14 + 16 = 30$

$30 + 6 = 36$

$36 * 1 = 36$

$36 * 1 = 36$

$36 : 9 = 4$

$4 : 2 = 2$

$2 - 2 = 0$

$0 + 15 = 15$

$15 + 11 = 26$

$26 + 19 = 45$

$45 + 8 = 53$

$53 * 3 = 159$

$159 * 3 = 477$

$477 * 3 = 1431$

$1431 : 3 = 477$

$477 : 3 = 159$

$159 * 1 = 159$

$159 * 2 = 318$

$318 : 6 = 53$

$53 - 18 = 35$

$35 : 5 = 7$

$7 * 3 = 21$

$21 - 17 = 4$

$4 + 8 = 12$

$12 - 5 = 7$

$7 * 3 = 21$

$21 * 2 = 42$

$42 * 2 = 84$

$84 + 10 = 94$

$94 * 1 = 94$

$94 : 2 = 47$

$47 * 3 = 141$

$141 : 3 = 47$

$47 * 1 = 47$

$47 - 15 = 32$

$32 - 2 = 30$

$30 - 12 = 18$

$7 + 10 = 17$

$17 + 16 = 33$

$33 : 11 = 3$

$3 * 1 = 3$

$3 : 3 = 1$

$1 + 11 = 12$

$12 + 20 = 32$

$32 - 12 = 20$

$20 - 10 = 10$

$10 * 2 = 20$

$20 : 5 = 4$

$4 + 13 = 17$

$17 - 17 = 0$

$0 + 12 = 12$

$12 + 11 = 23$

$23 + 8 = 31$

$31 - 17 = 14$

$14 + 5 = 19$

$19 * 1 = 19$

$19 + 1 = 20$

$20 : 2 = 10$

$10 + 6 = 16$

$16 * 1 = 16$

$16 + 13 = 29$

$29 + 13 = 42$

$42 + 5 = 47$

$47 - 6 = 41$

$41 + 7 = 48$

$48 : 3 = 16$

$16 - 6 = 10$

$10 : 2 = 5$

$5 - 3 = 2$

$2 + 16 = 18$

$18 + 7 = 25$

$25 + 2 = 27$

$27 : 3 = 9$

$9 : 9 = 1$

$1 * 3 = 3$

$12 + 8 = 20$

$20 * 3 = 60$

$60 + 5 = 65$

$65 * 2 = 130$

$130 * 2 = 260$

$260 + 3 = 263$

$263 * 3 = 789$

$789 : 3 = 263$

$263 - 10 = 253$

$253 - 5 = 248$

$248 + 15 = 263$

$263 - 19 = 244$

$244 + 18 = 262$

$262 + 17 = 279$

$279 : 9 = 31$

$31 + 17 = 48$

$48 - 16 = 32$

$32 - 8 = 24$

$24 : 4 = 6$

$6 + 7 = 13$

$13 * 1 = 13$

$13 + 12 = 25$

$25 - 16 = 9$

$9 - 2 = 7$

$7 + 9 = 16$

$16 : 2 = 8$

$8 * 2 = 16$

$16 * 1 = 16$

$16 + 19 = 35$

$35 + 4 = 39$

$39 : 3 = 13$

$13 : 13 = 1$

$1 + 16 = 17$

$17 - 16 = 1$

$1 + 1 = 2$

$2 * 3 = 6$

$6 : 6 = 1$

$1 * 3 = 3$

## Kopfrechnen (31)

$6 + 15 = 21$

$21 + 2 = 23$

$23 + 9 = 32$

$32 + 5 = 37$

$37 + 2 = 39$

$39 * 2 = 78$

$78 - 9 = 69$

$69 : 3 = 23$

$23 * 1 = 23$

$23 * 2 = 46$

$46 - 1 = 45$

$45 + 7 = 52$

$52 : 2 = 26$

$26 : 13 = 2$

$2 * 1 = 2$

$2 * 2 = 4$

$4 + 6 = 10$

$10 : 10 = 1$

$1 + 19 = 20$

$20 : 4 = 5$

$5 + 17 = 22$

$22 * 3 = 66$

$66 - 4 = 62$

$62 + 12 = 74$

$74 + 14 = 88$

$88 * 2 = 176$

$176 : 2 = 88$

$88 * 1 = 88$

$88 + 3 = 91$

$91 : 7 = 13$

$13 + 8 = 21$

$21 - 13 = 8$

$8 - 6 = 2$

$2 + 13 = 15$

$15 * 1 = 15$

$15 : 5 = 3$

$3 * 2 = 6$

$6 * 2 = 12$

$7 + 9 = 16$

$16 + 17 = 33$

$33 + 8 = 41$

$41 * 2 = 82$

$82 - 4 = 78$

$78 - 4 = 74$

$74 + 1 = 75$

$75 + 3 = 78$

$78 + 9 = 87$

$87 * 2 = 174$

$174 - 18 = 156$

$156 - 9 = 147$

$147 + 6 = 153$

$153 * 1 = 153$

$153 - 20 = 133$

$133 * 2 = 266$

$266 : 7 = 38$

$38 : 2 = 19$

$19 + 7 = 26$

$26 - 6 = 20$

$20 : 10 = 2$

$2 + 3 = 5$

$5 + 5 = 10$

$10 * 2 = 20$

$20 + 5 = 25$

$25 + 19 = 44$

$44 * 2 = 88$

$88 - 12 = 76$

$76 + 4 = 80$

$80 * 2 = 160$

$160 + 19 = 179$

$179 + 18 = 197$

$197 * 1 = 197$

$197 * 3 = 591$

$591 + 8 = 599$

$599 * 3 = 1797$

$1797 : 3 = 599$

$599 - 12 = 587$

$8 + 17 = 25$

$25 : 5 = 5$

$5 + 16 = 21$

$21 : 3 = 7$

$7 * 2 = 14$

$14 * 1 = 14$

$14 * 3 = 42$

$42 * 2 = 84$

$84 - 20 = 64$

$64 * 1 = 64$

$64 * 2 = 128$

$128 : 2 = 64$

$64 : 4 = 16$

$16 - 8 = 8$

$8 + 16 = 24$

$24 * 2 = 48$

$48 - 3 = 45$

$45 - 20 = 25$

$25 - 6 = 19$

$19 + 14 = 33$

$33 - 8 = 25$

$25 - 5 = 20$

$20 + 19 = 39$

$39 - 5 = 34$

$34 * 2 = 68$

$68 + 1 = 69$

$69 * 2 = 138$

$138 - 11 = 127$

$127 + 8 = 135$

$135 - 3 = 132$

$132 : 12 = 11$

$11 * 3 = 33$

$33 : 11 = 3$

$3 * 1 = 3$

$3 : 3 = 1$

$1 * 1 = 1$

$1 + 10 = 11$

$11 : 11 = 1$

## Kopfrechnen (32)

$8 + 7 = 15$   
 $15 * 3 = 45$   
 $45 + 7 = 52$   
 $52 + 19 = 71$   
 $71 - 9 = 62$   
 $62 * 2 = 124$   
 $124 - 19 = 105$   
 $105 * 1 = 105$   
 $105 * 1 = 105$   
 $105 : 5 = 21$   
 $21 + 6 = 27$   
 $27 * 2 = 54$   
 $54 - 15 = 39$   
 $39 : 13 = 3$   
 $3 + 4 = 7$   
 $7 - 5 = 2$   
 $2 + 19 = 21$   
 $21 + 10 = 31$   
 $31 + 7 = 38$   
 $38 + 18 = 56$   
 $56 : 4 = 14$   
 $14 * 2 = 28$   
 $28 * 2 = 56$   
 $56 : 8 = 7$   
 $7 + 14 = 21$   
 $21 * 1 = 21$   
 $21 - 18 = 3$   
 $3 + 6 = 9$   
 $9 + 9 = 18$   
 $18 : 2 = 9$   
 $9 * 3 = 27$   
 $27 : 9 = 3$   
 $3 * 2 = 6$   
 $6 * 2 = 12$   
 $12 + 7 = 19$   
 $19 + 18 = 37$   
 $37 * 2 = 74$   
 $74 + 19 = 93$

$3 + 12 = 15$   
 $15 * 3 = 45$   
 $45 : 5 = 9$   
 $9 * 3 = 27$   
 $27 - 1 = 26$   
 $26 * 3 = 78$   
 $78 * 1 = 78$   
 $78 - 3 = 75$   
 $75 * 2 = 150$   
 $150 : 5 = 30$   
 $30 + 18 = 48$   
 $48 + 5 = 53$   
 $53 * 3 = 159$   
 $159 + 20 = 179$   
 $179 + 20 = 199$   
 $199 + 19 = 218$   
 $218 - 17 = 201$   
 $201 * 3 = 603$   
 $603 + 1 = 604$   
 $604 + 6 = 610$   
 $610 : 10 = 61$   
 $61 * 1 = 61$   
 $61 - 1 = 60$   
 $60 : 3 = 20$   
 $20 + 12 = 32$   
 $32 - 20 = 12$   
 $12 * 2 = 24$   
 $24 * 1 = 24$   
 $24 + 12 = 36$   
 $36 : 3 = 12$   
 $12 * 1 = 12$   
 $12 * 1 = 12$   
 $12 : 2 = 6$   
 $6 - 3 = 3$   
 $3 : 3 = 1$   
 $1 * 3 = 3$   
 $3 + 7 = 10$   
 $10 * 2 = 20$   
 $8 + 15 = 23$

$23 + 3 = 26$   
 $26 : 2 = 13$   
 $13 + 15 = 28$   
 $28 * 2 = 56$   
 $56 + 4 = 60$   
 $60 - 19 = 41$   
 $41 - 15 = 26$   
 $26 : 13 = 2$   
 $2 + 6 = 8$   
 $8 - 1 = 7$   
 $7 + 14 = 21$   
 $21 - 16 = 5$   
 $5 + 8 = 13$   
 $13 : 13 = 1$   
 $1 + 19 = 20$   
 $20 + 7 = 27$   
 $27 + 3 = 30$   
 $30 - 9 = 21$   
 $21 : 3 = 7$   
 $7 : 7 = 1$   
 $1 * 1 = 1$   
 $1 - 1 = 0$   
 $0 + 18 = 18$   
 $18 * 1 = 18$   
 $18 - 2 = 16$   
 $16 : 8 = 2$   
 $2 - 1 = 1$   
 $1 * 2 = 2$   
 $2 : 2 = 1$   
 $1 + 8 = 9$   
 $9 : 3 = 3$   
 $3 * 2 = 6$   
 $6 * 2 = 12$   
 $12 * 1 = 12$   
 $12 : 6 = 2$   
 $2 : 2 = 1$   
 $1 + 16 = 17$



## Kopfrechnen (33)

$6 + 12 = 18$	$9 + 20 = 29$	$24 - 11 = 13$
$18 - 1 = 17$	$29 * 1 = 29$	$13 - 6 = 7$
$17 - 1 = 16$	$29 + 16 = 45$	$7 : 7 = 1$
$16 : 8 = 2$	$45 - 9 = 36$	$1 * 2 = 2$
$2 * 2 = 4$	$36 : 3 = 12$	$2 + 16 = 18$
$4 + 8 = 12$	$12 - 9 = 3$	$18 + 19 = 37$
$12 * 2 = 24$	$3 * 3 = 9$	$37 - 14 = 23$
$24 - 9 = 15$	$9 * 1 = 9$	$23 * 3 = 69$
$15 : 5 = 3$	$9 + 20 = 29$	$69 - 19 = 50$
$3 : 3 = 1$	$29 + 12 = 41$	$50 : 5 = 10$
$1 * 2 = 2$	$41 * 2 = 82$	$10 * 2 = 20$
$2 + 17 = 19$	$82 + 20 = 102$	$20 - 12 = 8$
$19 * 3 = 57$	$102 - 19 = 83$	$8 * 2 = 16$
$57 * 3 = 171$	$83 * 2 = 166$	$16 + 18 = 34$
$171 * 3 = 513$	$166 - 18 = 148$	$34 - 10 = 24$
$513 : 3 = 171$	$148 - 8 = 140$	$24 * 1 = 24$
$171 * 3 = 513$	$140 + 15 = 155$	$24 * 1 = 24$
$513 + 3 = 516$	$155 : 5 = 31$	$24 : 6 = 4$
$516 * 2 = 1032$	$31 * 3 = 93$	$4 * 1 = 4$
$1032 * 1 = 1032$	$93 - 10 = 83$	$4 : 4 = 1$
$1032 + 17 = 1049$	$83 - 1 = 82$	$1 * 1 = 1$
$1049 + 1 = 1050$	$82 : 2 = 41$	$1 + 3 = 4$
$1050 : 10 = 105$	$41 * 3 = 123$	$4 : 4 = 1$
$105 * 3 = 315$	$123 : 3 = 41$	$1 + 17 = 18$
$315 : 9 = 35$	$41 - 5 = 36$	$18 + 3 = 21$
$35 + 9 = 44$	$36 - 7 = 29$	$21 + 1 = 22$
$44 : 2 = 22$	$29 - 7 = 22$	$22 + 9 = 31$
$22 + 12 = 34$	$22 : 11 = 2$	$31 - 15 = 16$
$34 + 4 = 38$	$2 : 2 = 1$	$16 * 2 = 32$
$38 - 17 = 21$	$1 + 12 = 13$	$32 * 1 = 32$
$21 : 3 = 7$	$13 : 13 = 1$	$32 + 9 = 41$
$7 : 7 = 1$	$1 + 13 = 14$	$41 - 9 = 32$
$1 * 3 = 3$	$14 * 3 = 42$	$32 - 13 = 19$
$3 * 3 = 9$	$42 * 3 = 126$	$19 * 2 = 38$
$9 : 3 = 3$	$126 : 9 = 14$	$38 : 2 = 19$
$3 : 3 = 1$	$14 - 3 = 11$	$19 - 15 = 4$
$1 * 2 = 2$	$11 * 1 = 11$	$4 + 18 = 22$
$2 + 16 = 18$	$11 + 15 = 26$	
	$7 + 17 = 24$	

## Kopfrechnen (34)

$8 + 12 = 20$	$5 + 13 = 18$	$11 * 1 = 11$
$20 - 8 = 12$	$18 - 3 = 15$	$11 * 2 = 22$
$12 : 12 = 1$	$15 - 5 = 10$	$22 : 11 = 2$
$1 + 20 = 21$	$10 + 17 = 27$	$2 : 2 = 1$
$21 - 8 = 13$	$27 : 9 = 3$	$1 + 10 = 11$
$13 * 3 = 39$	$3 + 13 = 16$	$11 + 20 = 31$
$39 : 13 = 3$	$16 : 4 = 4$	$31 + 2 = 33$
$3 * 2 = 6$	$4 + 13 = 17$	$33 * 1 = 33$
$6 * 2 = 12$	$17 * 2 = 34$	$33 : 3 = 11$
$12 : 2 = 6$	$34 - 7 = 27$	$11 + 9 = 20$
$6 * 2 = 12$	$27 + 7 = 34$	$20 - 19 = 1$
$12 * 3 = 36$	$34 * 1 = 34$	$1 * 3 = 3$
$36 + 15 = 51$	$34 - 13 = 21$	$3 + 18 = 21$
$51 - 8 = 43$	$21 + 12 = 33$	$21 * 2 = 42$
$43 - 14 = 29$	$33 : 11 = 3$	$42 * 3 = 126$
$29 * 1 = 29$	$3 * 1 = 3$	$126 * 2 = 252$
$29 * 3 = 87$	$3 + 14 = 17$	$252 - 9 = 243$
$87 - 1 = 86$	$17 * 3 = 51$	$243 * 1 = 243$
$86 + 16 = 102$	$51 - 20 = 31$	$243 - 1 = 242$
$102 - 13 = 89$	$31 - 1 = 30$	$242 * 1 = 242$
$89 * 3 = 267$	$30 * 3 = 90$	$242 - 3 = 239$
$267 - 16 = 251$	$90 * 2 = 180$	$239 + 12 = 251$
$251 * 1 = 251$	$180 : 12 = 15$	$251 - 1 = 250$
$251 + 8 = 259$	$15 * 3 = 45$	$250 - 17 = 233$
$259 + 9 = 268$	$45 + 8 = 53$	$233 + 10 = 243$
$268 * 2 = 536$	$53 + 8 = 61$	$243 * 1 = 243$
$536 + 2 = 538$	$61 - 2 = 59$	$243 - 4 = 239$
$538 * 3 = 1614$	$59 - 9 = 50$	$239 * 3 = 717$
$1614 * 3 = 4842$	$50 : 10 = 5$	$717 - 10 = 707$
$4842 + 20 = 4862$	$5 * 3 = 15$	$707 + 3 = 710$
$4862 : 2 = 2431$	$15 * 2 = 30$	$710 * 3 = 2130$
$2431 * 1 = 2431$	$30 : 6 = 5$	$2130 - 9 = 2121$
$2431 : 13 = 187$	$5 - 4 = 1$	$2121 : 7 = 303$
$187 + 14 = 201$	$1 + 15 = 16$	$303 - 20 = 283$
$201 - 5 = 196$	$16 : 4 = 4$	$283 + 8 = 291$
$196 - 5 = 191$	$4 * 3 = 12$	$291 + 17 = 308$
$191 * 1 = 191$	$12 : 3 = 4$	$308 * 2 = 616$
$191 - 2 = 189$	$4 * 3 = 12$	
	$10 + 1 = 11$	

## Kopfrechnen (35)

$$\begin{aligned}12 + 9 &= 21 \\21 - 11 &= 10 \\10 - 2 &= 8 \\8 : 2 &= 4 \\4 * 3 &= 12 \\12 + 13 &= 25 \\25 : 5 &= 5 \\5 + 15 &= 20 \\20 + 9 &= 29 \\29 + 16 &= 45 \\45 + 4 &= 49 \\49 + 17 &= 66 \\66 - 12 &= 54 \\54 : 9 &= 6 \\6 : 3 &= 2 \\2 + 6 &= 8 \\8 * 2 &= 16 \\16 * 3 &= 48 \\48 : 8 &= 6 \\6 + 20 &= 26 \\26 : 13 &= 2 \\2 : 2 &= 1 \\1 + 1 &= 2 \\2 * 2 &= 4 \\4 * 2 &= 8 \\8 * 1 &= 8 \\8 * 2 &= 16 \\16 + 14 &= 30 \\30 * 2 &= 60 \\60 : 4 &= 15 \\15 - 14 &= 1 \\1 + 16 &= 17 \\17 + 2 &= 19 \\19 - 5 &= 14 \\14 * 3 &= 42 \\42 * 3 &= 126 \\126 : 7 &= 18 \\18 - 2 &= 16\end{aligned}$$

$$\begin{aligned}2 + 17 &= 19 \\19 - 5 &= 14 \\14 * 3 &= 42 \\42 * 1 &= 42 \\42 + 15 &= 57 \\57 : 3 &= 19 \\19 * 3 &= 57 \\57 : 3 &= 19 \\19 - 13 &= 6 \\6 + 6 &= 12 \\12 + 2 &= 14 \\14 + 12 &= 26 \\26 - 13 &= 13 \\13 : 13 &= 1 \\1 * 3 &= 3 \\3 : 3 &= 1 \\1 + 2 &= 3 \\3 + 17 &= 20 \\20 - 5 &= 15 \\15 - 2 &= 13 \\13 + 12 &= 25 \\25 + 11 &= 36 \\36 - 11 &= 25 \\25 - 15 &= 10 \\10 - 5 &= 5 \\5 + 2 &= 7 \\7 - 7 &= 0 \\0 + 11 &= 11 \\11 * 1 &= 11 \\11 : 11 &= 1 \\1 + 12 &= 13 \\13 + 15 &= 28 \\28 + 15 &= 43 \\43 * 1 &= 43 \\43 + 16 &= 59 \\59 - 2 &= 57 \\57 - 16 &= 41 \\41 + 7 &= 48 \\1 + 17 &= 18\end{aligned}$$

$$\begin{aligned}18 * 3 &= 54 \\54 + 14 &= 68 \\68 - 12 &= 56 \\56 + 17 &= 73 \\73 + 17 &= 90 \\90 : 9 &= 10 \\10 * 1 &= 10 \\10 : 5 &= 2 \\2 * 3 &= 6 \\6 * 1 &= 6 \\6 : 2 &= 3 \\3 : 3 &= 1 \\1 * 3 &= 3 \\3 + 7 &= 10 \\10 * 3 &= 30 \\30 * 3 &= 90 \\90 - 4 &= 86 \\86 : 2 &= 43 \\43 - 8 &= 35 \\35 : 7 &= 5 \\5 + 2 &= 7 \\7 * 1 &= 7 \\7 + 8 &= 15 \\15 + 2 &= 17 \\17 * 2 &= 34 \\34 * 1 &= 34 \\34 * 2 &= 68 \\68 : 2 &= 34 \\34 + 2 &= 36 \\36 - 16 &= 20 \\20 - 16 &= 4 \\4 : 4 &= 1 \\1 + 9 &= 10 \\10 - 4 &= 6 \\6 - 2 &= 4 \\4 * 1 &= 4 \\4 : 2 &= 2\end{aligned}$$

## Kopfrechnen (36)

$2 + 8 = 10$   
 $10 + 13 = 23$   
 $23 + 11 = 34$   
 $34 + 10 = 44$   
 $44 : 2 = 22$   
 $22 + 16 = 38$   
 $38 : 2 = 19$   
 $19 - 8 = 11$   
 $11 + 12 = 23$   
 $23 + 4 = 27$   
 $27 + 1 = 28$   
 $28 : 4 = 7$   
 $7 * 1 = 7$   
 $7 + 5 = 12$   
 $12 : 4 = 3$   
 $3 * 1 = 3$   
 $3 : 3 = 1$   
 $1 + 13 = 14$   
 $14 * 3 = 42$   
 $42 * 1 = 42$   
 $42 : 3 = 14$   
 $14 * 1 = 14$   
 $14 * 1 = 14$   
 $14 + 2 = 16$   
 $16 - 16 = 0$   
 $0 + 9 = 9$   
 $9 + 10 = 19$   
 $19 + 6 = 25$   
 $25 : 5 = 5$   
 $5 : 5 = 1$   
 $1 * 1 = 1$   
 $1 * 1 = 1$   
 $1 + 4 = 5$   
 $5 + 10 = 15$   
 $15 : 3 = 5$   
 $5 : 5 = 1$   
 $1 + 14 = 15$   
 $15 + 4 = 19$

$9 + 9 = 18$   
 $18 - 12 = 6$   
 $6 : 2 = 3$   
 $3 + 2 = 5$   
 $5 + 13 = 18$   
 $18 : 2 = 9$   
 $9 * 1 = 9$   
 $9 - 7 = 2$   
 $2 * 3 = 6$   
 $6 * 2 = 12$   
 $12 : 2 = 6$   
 $6 : 2 = 3$   
 $3 : 3 = 1$   
 $1 * 1 = 1$   
 $1 * 2 = 2$   
 $2 * 3 = 6$   
 $6 + 3 = 9$   
 $9 : 9 = 1$   
 $1 + 19 = 20$   
 $20 - 7 = 13$   
 $13 * 3 = 39$   
 $39 - 15 = 24$   
 $24 * 1 = 24$   
 $24 + 13 = 37$   
 $37 * 2 = 74$   
 $74 : 2 = 37$   
 $37 + 3 = 40$   
 $40 - 11 = 29$   
 $29 - 2 = 27$   
 $27 * 2 = 54$   
 $54 * 1 = 54$   
 $54 + 2 = 56$   
 $56 - 2 = 54$   
 $54 + 6 = 60$   
 $60 : 4 = 15$   
 $15 - 3 = 12$   
 $12 + 15 = 27$   
 $27 - 13 = 14$   
 $10 + 12 = 22$

$22 * 3 = 66$   
 $66 + 5 = 71$   
 $71 + 6 = 77$   
 $77 + 6 = 83$   
 $83 + 17 = 100$   
 $100 + 9 = 109$   
 $109 + 6 = 115$   
 $115 * 1 = 115$   
 $115 + 11 = 126$   
 $126 - 15 = 111$   
 $111 * 3 = 333$   
 $333 + 15 = 348$   
 $348 : 6 = 58$   
 $58 - 14 = 44$   
 $44 - 4 = 40$   
 $40 - 13 = 27$   
 $27 - 6 = 21$   
 $21 * 2 = 42$   
 $42 + 4 = 46$   
 $46 + 6 = 52$   
 $52 - 14 = 38$   
 $38 + 13 = 51$   
 $51 - 18 = 33$   
 $33 + 20 = 53$   
 $53 + 7 = 60$   
 $60 + 7 = 67$   
 $67 - 5 = 62$   
 $62 - 12 = 50$   
 $50 : 5 = 10$   
 $10 * 1 = 10$   
 $10 - 8 = 2$   
 $2 + 13 = 15$   
 $15 * 2 = 30$   
 $30 * 3 = 90$   
 $90 : 10 = 9$   
 $9 + 11 = 20$   
 $20 + 1 = 21$

## Kopfrechnen (37)

$11 + 13 = 24$	$1 + 1 = 2$	$8 + 12 = 20$
$24 * 3 = 72$	$2 * 2 = 4$	$20 : 4 = 5$
$72 - 7 = 65$	$4 * 3 = 12$	$5 * 1 = 5$
$65 - 7 = 58$	$12 : 6 = 2$	$5 - 3 = 2$
$58 + 9 = 67$	$2 - 1 = 1$	$2 * 3 = 6$
$67 + 1 = 68$	$1 + 19 = 20$	$6 : 6 = 1$
$68 + 7 = 75$	$20 * 2 = 40$	$1 * 1 = 1$
$75 + 20 = 95$	$40 + 17 = 57$	$1 * 1 = 1$
$95 * 3 = 285$	$57 : 3 = 19$	$1 * 1 = 1$
$285 - 11 = 274$	$19 - 13 = 6$	$1 + 7 = 8$
$274 + 19 = 293$	$6 : 6 = 1$	$8 * 1 = 8$
$293 - 11 = 282$	$1 * 1 = 1$	$8 : 8 = 1$
$282 : 2 = 141$	$1 + 18 = 19$	$1 * 1 = 1$
$141 : 3 = 47$	$19 - 11 = 8$	$1 + 19 = 20$
$47 - 2 = 45$	$8 : 8 = 1$	$20 * 1 = 20$
$45 + 4 = 49$	$1 + 17 = 18$	$20 : 2 = 10$
$49 - 13 = 36$	$18 + 16 = 34$	$10 * 2 = 20$
$36 * 3 = 108$	$34 * 3 = 102$	$20 * 2 = 40$
$108 - 1 = 107$	$102 + 2 = 104$	$40 - 12 = 28$
$107 + 12 = 119$	$104 * 3 = 312$	$28 - 20 = 8$
$119 + 12 = 131$	$312 * 2 = 624$	$8 : 4 = 2$
$131 * 2 = 262$	$624 + 2 = 626$	$2 : 2 = 1$
$262 * 1 = 262$	$626 + 6 = 632$	$1 * 2 = 2$
$262 - 1 = 261$	$632 + 5 = 637$	$2 : 2 = 1$
$261 - 14 = 247$	$637 * 1 = 637$	$1 + 14 = 15$
$247 - 10 = 237$	$637 * 3 = 1911$	$15 - 1 = 14$
$237 : 3 = 79$	$1911 + 18 = 1929$	$14 : 7 = 2$
$79 + 6 = 85$	$1929 * 3 = 5787$	$2 : 2 = 1$
$85 * 1 = 85$	$5787 * 3 = 17361$	$1 + 6 = 7$
$85 : 5 = 17$	$17361 + 13 = 17374$	$7 * 1 = 7$
$17 - 16 = 1$	$17374 * 2 = 34748$	$7 : 7 = 1$
$1 * 3 = 3$	$34748 + 11 = 34759$	$1 + 7 = 8$
$3 * 2 = 6$	$34759 - 6 = 34753$	$8 + 6 = 14$
$6 + 20 = 26$	$34753 * 3 = 104259$	$14 - 8 = 6$
$26 * 2 = 52$	$104259 + 10 = 104269$	$6 * 1 = 6$
$52 * 1 = 52$	$104269 : 11 = 9479$	$6 + 5 = 11$
$52 + 8 = 60$	$9479 + 2 = 9481$	$11 - 4 = 7$
$60 : 10 = 6$	$9481 + 4 = 9485$	
	$2 + 6 = 8$	

## Kopfrechnen (38)

$11 + 10 = 21$

$21 : 7 = 3$

$3 - 1 = 2$

$2 + 16 = 18$

$18 : 2 = 9$

$9 : 9 = 1$

$1 + 1 = 2$

$2 * 1 = 2$

$2 * 2 = 4$

$4 * 3 = 12$

$12 : 6 = 2$

$2 : 2 = 1$

$1 + 19 = 20$

$20 * 1 = 20$

$20 * 1 = 20$

$20 + 15 = 35$

$35 + 19 = 54$

$54 - 8 = 46$

$46 * 3 = 138$

$138 : 2 = 69$

$69 * 3 = 207$

$207 * 1 = 207$

$207 * 3 = 621$

$621 + 9 = 630$

$630 + 7 = 637$

$637 + 5 = 642$

$642 - 6 = 636$

$636 : 3 = 212$

$212 : 4 = 53$

$53 * 3 = 159$

$159 * 3 = 477$

$477 - 2 = 475$

$475 - 18 = 457$

$457 * 2 = 914$

$914 : 2 = 457$

$457 + 3 = 460$

$460 * 3 = 1380$

$1380 - 5 = 1375$

$9 + 15 = 24$

$24 : 2 = 12$

$12 : 2 = 6$

$6 + 20 = 26$

$26 - 3 = 23$

$23 - 7 = 16$

$16 - 15 = 1$

$1 + 16 = 17$

$17 - 15 = 2$

$2 : 2 = 1$

$1 + 17 = 18$

$18 + 1 = 19$

$19 + 9 = 28$

$28 - 2 = 26$

$26 : 2 = 13$

$13 - 5 = 8$

$8 * 2 = 16$

$16 : 8 = 2$

$2 + 13 = 15$

$15 : 5 = 3$

$3 + 14 = 17$

$17 - 15 = 2$

$2 : 2 = 1$

$1 * 1 = 1$

$1 + 7 = 8$

$8 : 2 = 4$

$4 : 2 = 2$

$2 : 2 = 1$

$1 + 13 = 14$

$14 - 8 = 6$

$6 : 3 = 2$

$2 + 7 = 9$

$9 + 16 = 25$

$25 * 2 = 50$

$50 * 2 = 100$

$100 : 5 = 20$

$20 - 13 = 7$

$7 - 4 = 3$

$8 + 19 = 27$

$27 : 3 = 9$

$9 + 17 = 26$

$26 - 19 = 7$

$7 + 6 = 13$

$13 + 15 = 28$

$28 * 2 = 56$

$56 + 6 = 62$

$62 - 6 = 56$

$56 - 18 = 38$

$38 - 3 = 35$

$35 - 9 = 26$

$26 + 5 = 31$

$31 * 2 = 62$

$62 + 20 = 82$

$82 : 2 = 41$

$41 + 4 = 45$

$45 : 5 = 9$

$9 + 6 = 15$

$15 : 3 = 5$

$5 : 5 = 1$

$1 * 2 = 2$

$2 * 1 = 2$

$2 * 3 = 6$

$6 + 18 = 24$

$24 - 6 = 18$

$18 + 5 = 23$

$23 - 18 = 5$

$5 + 10 = 15$

$15 - 15 = 0$

$0 + 13 = 13$

$13 + 4 = 17$

$17 * 3 = 51$

$51 * 2 = 102$

$102 : 6 = 17$

$17 + 3 = 20$

$20 + 14 = 34$

$34 - 15 = 19$

## Kopfrechnen (39)

$11 + 14 = 25$	$2 + 11 = 13$	$16 : 4 = 4$
$25 - 9 = 16$	$13 : 13 = 1$	$4 - 3 = 1$
$16 * 3 = 48$	$1 * 2 = 2$	$1 * 3 = 3$
$48 * 1 = 48$	$2 * 2 = 4$	$3 * 2 = 6$
$48 * 3 = 144$	$4 + 5 = 9$	$6 : 6 = 1$
$144 + 2 = 146$	$9 * 1 = 9$	$1 + 8 = 9$
$146 + 4 = 150$	$9 - 5 = 4$	$9 + 4 = 13$
$150 + 6 = 156$	$4 * 1 = 4$	$13 + 15 = 28$
$156 + 20 = 176$	$4 : 2 = 2$	$28 + 3 = 31$
$176 + 16 = 192$	$2 * 3 = 6$	$31 + 7 = 38$
$192 - 20 = 172$	$6 * 1 = 6$	$38 + 6 = 44$
$172 - 14 = 158$	$6 + 17 = 23$	$44 - 6 = 38$
$158 * 3 = 474$	$23 - 17 = 6$	$38 + 15 = 53$
$474 * 1 = 474$	$6 * 1 = 6$	$53 - 20 = 33$
$474 - 15 = 459$	$6 : 6 = 1$	$33 : 11 = 3$
$459 + 20 = 479$	$1 * 3 = 3$	$3 + 17 = 20$
$479 * 1 = 479$	$3 * 2 = 6$	$20 + 20 = 40$
$479 * 3 = 1437$	$6 - 6 = 0$	$40 + 11 = 51$
$1437 + 18 = 1455$	$0 + 7 = 7$	$51 * 1 = 51$
$1455 + 1 = 1456$	$7 + 7 = 14$	$51 : 3 = 17$
$1456 : 4 = 364$	$14 : 7 = 2$	$17 + 19 = 36$
$364 * 3 = 1092$	$2 * 2 = 4$	$36 + 18 = 54$
$1092 + 20 = 1112$	$4 * 2 = 8$	$54 : 3 = 18$
$1112 + 2 = 1114$	$8 + 12 = 20$	$18 : 6 = 3$
$1114 : 2 = 557$	$20 - 12 = 8$	$3 + 11 = 14$
$557 * 1 = 557$	$8 : 4 = 2$	$14 * 2 = 28$
$557 * 1 = 557$	$2 + 11 = 13$	$28 + 12 = 40$
$557 + 3 = 560$	$13 + 10 = 23$	$40 : 8 = 5$
$560 * 1 = 560$	$23 * 2 = 46$	$5 * 3 = 15$
$560 + 5 = 565$	$46 : 2 = 23$	$15 : 5 = 3$
$565 * 1 = 565$	$23 + 15 = 38$	$3 : 3 = 1$
$565 : 5 = 113$	$38 - 9 = 29$	$1 * 1 = 1$
$113 * 3 = 339$	$29 - 10 = 19$	$1 + 9 = 10$
$339 * 2 = 678$	$19 * 3 = 57$	$10 * 1 = 10$
$678 : 2 = 339$	$57 + 20 = 77$	$10 - 7 = 3$
$339 : 3 = 113$	$77 : 11 = 7$	$3 : 3 = 1$
$113 + 17 = 130$	$7 * 2 = 14$	$1 * 2 = 2$
$130 + 13 = 143$	$14 : 2 = 7$	
	$10 + 6 = 16$	

## Kopfrechnen (40)

$11 + 4 = 15$	$11 + 11 = 22$	$7 + 5 = 12$
$15 + 12 = 27$	$22 + 14 = 36$	$12 * 3 = 36$
$27 - 7 = 20$	$36 + 15 = 51$	$36 : 4 = 9$
$20 * 3 = 60$	$51 - 3 = 48$	$9 - 4 = 5$
$60 - 13 = 47$	$48 - 7 = 41$	$5 + 12 = 17$
$47 - 14 = 33$	$41 - 2 = 39$	$17 + 17 = 34$
$33 + 12 = 45$	$39 + 3 = 42$	$34 - 15 = 19$
$45 - 3 = 42$	$42 : 7 = 6$	$19 + 19 = 38$
$42 * 2 = 84$	$6 * 1 = 6$	$38 : 2 = 19$
$84 - 2 = 82$	$6 : 2 = 3$	$19 + 5 = 24$
$82 + 20 = 102$	$3 : 3 = 1$	$24 - 4 = 20$
$102 * 3 = 306$	$1 * 2 = 2$	$20 : 10 = 2$
$306 - 20 = 286$	$2 + 17 = 19$	$2 * 2 = 4$
$286 * 1 = 286$	$19 * 1 = 19$	$4 + 1 = 5$
$286 * 3 = 858$	$19 + 3 = 22$	$5 * 1 = 5$
$858 + 18 = 876$	$22 - 16 = 6$	$5 + 10 = 15$
$876 : 6 = 146$	$6 + 18 = 24$	$15 + 13 = 28$
$146 : 2 = 73$	$24 + 2 = 26$	$28 + 12 = 40$
$73 - 15 = 58$	$26 - 15 = 11$	$40 + 8 = 48$
$58 : 2 = 29$	$11 : 11 = 1$	$48 : 12 = 4$
$29 + 16 = 45$	$1 + 16 = 17$	$4 + 3 = 7$
$45 : 9 = 5$	$17 - 14 = 3$	$7 : 7 = 1$
$5 * 2 = 10$	$3 - 2 = 1$	$1 + 8 = 9$
$10 : 5 = 2$	$1 + 12 = 13$	$9 : 3 = 3$
$2 + 18 = 20$	$13 + 6 = 19$	$3 + 4 = 7$
$20 : 2 = 10$	$19 * 3 = 57$	$7 * 3 = 21$
$10 : 10 = 1$	$57 : 3 = 19$	$21 : 7 = 3$
$1 + 3 = 4$	$19 - 10 = 9$	$3 * 2 = 6$
$4 * 2 = 8$	$9 : 9 = 1$	$6 : 2 = 3$
$8 : 2 = 4$	$1 * 1 = 1$	$3 : 3 = 1$
$4 : 4 = 1$	$1 + 8 = 9$	$1 * 3 = 3$
$1 + 5 = 6$	$9 : 3 = 3$	$3 + 17 = 20$
$6 * 1 = 6$	$3 + 10 = 13$	$20 + 4 = 24$
$6 * 1 = 6$	$13 - 8 = 5$	$24 * 3 = 72$
$6 * 3 = 18$	$5 : 5 = 1$	$72 - 5 = 67$
$18 - 14 = 4$	$1 + 15 = 16$	$67 + 6 = 73$
$4 * 3 = 12$	$16 : 4 = 4$	$73 + 10 = 83$
$12 * 3 = 36$	$4 * 3 = 12$	
	$6 + 1 = 7$	



## Kopfrechnen (41)

$12 + 9 = 21$	$5 + 15 = 20$	$14 + 14 = 28$
$21 : 7 = 3$	$20 + 20 = 40$	$28 - 19 = 9$
$3 : 3 = 1$	$40 - 6 = 34$	$9 : 3 = 3$
$1 + 12 = 13$	$34 * 1 = 34$	$3 : 3 = 1$
$13 + 17 = 30$	$34 - 15 = 19$	$1 * 3 = 3$
$30 + 2 = 32$	$19 - 5 = 14$	$3 * 2 = 6$
$32 + 15 = 47$	$14 : 7 = 2$	$6 * 2 = 12$
$47 * 3 = 141$	$2 + 16 = 18$	$12 + 2 = 14$
$141 : 3 = 47$	$18 + 20 = 38$	$14 + 9 = 23$
$47 - 18 = 29$	$38 * 3 = 114$	$23 + 13 = 36$
$29 * 3 = 87$	$114 : 3 = 38$	$36 - 3 = 33$
$87 - 12 = 75$	$38 * 1 = 38$	$33 * 3 = 99$
$75 - 3 = 72$	$38 + 19 = 57$	$99 - 1 = 98$
$72 + 11 = 83$	$57 * 2 = 114$	$98 + 10 = 108$
$83 - 13 = 70$	$114 - 11 = 103$	$108 + 17 = 125$
$70 : 10 = 7$	$103 - 14 = 89$	$125 * 1 = 125$
$7 + 16 = 23$	$89 + 9 = 98$	$125 : 5 = 25$
$23 + 20 = 43$	$98 + 4 = 102$	$25 + 16 = 41$
$43 + 19 = 62$	$102 - 17 = 85$	$41 * 2 = 82$
$62 - 15 = 47$	$85 * 1 = 85$	$82 - 5 = 77$
$47 * 2 = 94$	$85 * 2 = 170$	$77 : 7 = 11$
$94 + 17 = 111$	$170 - 5 = 165$	$11 + 4 = 15$
$111 : 3 = 37$	$165 - 12 = 153$	$15 - 1 = 14$
$37 - 12 = 25$	$153 * 3 = 459$	$14 + 13 = 27$
$25 + 20 = 45$	$459 + 17 = 476$	$27 + 1 = 28$
$45 - 1 = 44$	$476 * 3 = 1428$	$28 : 4 = 7$
$44 * 2 = 88$	$1428 * 3 = 4284$	$7 * 2 = 14$
$88 : 11 = 8$	$4284 + 16 = 4300$	$14 : 7 = 2$
$8 * 3 = 24$	$4300 : 10 = 430$	$2 + 17 = 19$
$24 - 17 = 7$	$430 * 2 = 860$	$19 - 14 = 5$
$7 + 10 = 17$	$860 : 10 = 86$	$5 * 1 = 5$
$17 + 13 = 30$	$86 * 2 = 172$	$5 * 1 = 5$
$30 + 15 = 45$	$172 + 15 = 187$	$5 + 19 = 24$
$45 - 17 = 28$	$187 - 4 = 183$	$24 - 7 = 17$
$28 : 7 = 4$	$183 : 3 = 61$	$17 + 9 = 26$
$4 : 4 = 1$	$61 * 3 = 183$	$26 - 18 = 8$
$1 * 1 = 1$	$183 - 16 = 167$	$8 + 3 = 11$
$1 - 1 = 0$	$167 - 20 = 147$	
	$7 + 7 = 14$	

## Kopfrechnen (42)

$1 + 6 = 7$   
 $7 * 1 = 7$   
 $7 : 7 = 1$   
 $1 + 1 = 2$   
 $2 * 1 = 2$   
 $2 * 3 = 6$   
 $6 - 3 = 3$   
 $3 + 5 = 8$   
 $8 * 3 = 24$   
 $24 : 2 = 12$   
 $12 : 2 = 6$   
 $6 + 10 = 16$   
 $16 - 4 = 12$   
 $12 * 2 = 24$   
 $24 + 5 = 29$   
 $29 * 1 = 29$   
 $29 * 1 = 29$   
 $29 - 20 = 9$   
 $9 : 9 = 1$   
 $1 * 1 = 1$   
 $1 * 2 = 2$   
 $2 : 2 = 1$   
 $1 - 1 = 0$   
 $0 + 10 = 10$   
 $10 * 1 = 10$   
 $10 * 2 = 20$   
 $20 + 12 = 32$   
 $32 + 16 = 48$   
 $48 - 8 = 40$   
 $40 * 1 = 40$   
 $40 : 10 = 4$   
 $4 : 4 = 1$   
 $1 + 2 = 3$   
 $3 + 3 = 6$   
 $6 + 8 = 14$   
 $14 - 11 = 3$   
 $3 + 14 = 17$   
 $17 + 11 = 28$

$12 + 20 = 32$   
 $32 + 5 = 37$   
 $37 * 3 = 111$   
 $111 * 3 = 333$   
 $333 + 2 = 335$   
 $335 + 8 = 343$   
 $343 + 10 = 353$   
 $353 - 3 = 350$   
 $350 + 20 = 370$   
 $370 * 2 = 740$   
 $740 + 17 = 757$   
 $757 - 13 = 744$   
 $744 * 2 = 1488$   
 $1488 : 3 = 496$   
 $496 - 6 = 490$   
 $490 - 16 = 474$   
 $474 - 20 = 454$   
 $454 * 1 = 454$   
 $454 * 3 = 1362$   
 $1362 : 3 = 454$   
 $454 + 17 = 471$   
 $471 - 5 = 466$   
 $466 * 2 = 932$   
 $932 * 3 = 2796$   
 $2796 : 3 = 932$   
 $932 : 2 = 466$   
 $466 + 1 = 467$   
 $467 * 2 = 934$   
 $934 - 15 = 919$   
 $919 - 3 = 916$   
 $916 - 15 = 901$   
 $901 - 20 = 881$   
 $881 + 13 = 894$   
 $894 * 1 = 894$   
 $894 : 3 = 298$   
 $298 - 2 = 296$   
 $296 - 10 = 286$   
 $286 * 1 = 286$   
 $9 + 15 = 24$

$24 - 7 = 17$   
 $17 * 1 = 17$   
 $17 - 5 = 12$   
 $12 + 16 = 28$   
 $28 : 4 = 7$   
 $7 - 1 = 6$   
 $6 + 3 = 9$   
 $9 - 9 = 0$   
 $0 + 4 = 4$   
 $4 * 3 = 12$   
 $12 + 20 = 32$   
 $32 - 2 = 30$   
 $30 - 20 = 10$   
 $10 + 6 = 16$   
 $16 : 2 = 8$   
 $8 - 2 = 6$   
 $6 * 1 = 6$   
 $6 : 6 = 1$   
 $1 + 2 = 3$   
 $3 - 3 = 0$   
 $0 + 2 = 2$   
 $2 * 1 = 2$   
 $2 + 11 = 13$   
 $13 + 11 = 24$   
 $24 - 16 = 8$   
 $8 + 11 = 19$   
 $19 + 11 = 30$   
 $30 + 6 = 36$   
 $36 + 20 = 56$   
 $56 : 2 = 28$   
 $28 - 7 = 21$   
 $21 * 3 = 63$   
 $63 - 19 = 44$   
 $44 + 19 = 63$   
 $63 : 3 = 21$   
 $21 * 2 = 42$   
 $42 * 1 = 42$

## Kopfrechnen (43)

$3 + 8 = 11$	$11 + 10 = 21$	$16 + 17 = 33$
$11 : 11 = 1$	$21 + 15 = 36$	$33 - 17 = 16$
$1 + 17 = 18$	$36 + 18 = 54$	$16 * 2 = 32$
$18 - 18 = 0$	$54 + 7 = 61$	$32 * 3 = 96$
$0 + 8 = 8$	$61 - 17 = 44$	$96 : 2 = 48$
$8 * 3 = 24$	$44 : 2 = 22$	$48 - 4 = 44$
$24 * 1 = 24$	$22 - 8 = 14$	$44 + 7 = 51$
$24 * 1 = 24$	$14 : 2 = 7$	$51 - 12 = 39$
$24 * 3 = 72$	$7 * 3 = 21$	$39 : 13 = 3$
$72 : 12 = 6$	$21 + 8 = 29$	$3 + 17 = 20$
$6 * 2 = 12$	$29 + 14 = 43$	$20 + 20 = 40$
$12 : 3 = 4$	$43 * 2 = 86$	$40 + 20 = 60$
$4 * 3 = 12$	$86 - 19 = 67$	$60 * 2 = 120$
$12 : 4 = 3$	$67 - 11 = 56$	$120 - 7 = 113$
$3 * 2 = 6$	$56 - 16 = 40$	$113 * 1 = 113$
$6 * 1 = 6$	$40 - 1 = 39$	$113 + 17 = 130$
$6 - 6 = 0$	$39 - 5 = 34$	$130 * 3 = 390$
$0 + 1 = 1$	$34 - 3 = 31$	$390 + 6 = 396$
$1 + 17 = 18$	$31 + 2 = 33$	$396 : 4 = 99$
$18 : 6 = 3$	$33 - 19 = 14$	$99 - 5 = 94$
$3 + 14 = 17$	$14 * 2 = 28$	$94 + 7 = 101$
$17 - 16 = 1$	$28 * 3 = 84$	$101 + 3 = 104$
$1 * 3 = 3$	$84 - 6 = 78$	$104 - 7 = 97$
$3 + 19 = 22$	$78 : 6 = 13$	$97 + 6 = 103$
$22 * 3 = 66$	$13 - 2 = 11$	$103 + 17 = 120$
$66 : 6 = 11$	$11 + 4 = 15$	$120 - 6 = 114$
$11 + 18 = 29$	$15 * 3 = 45$	$114 * 1 = 114$
$29 * 1 = 29$	$45 * 1 = 45$	$114 : 6 = 19$
$29 - 17 = 12$	$45 : 9 = 5$	$19 * 1 = 19$
$12 * 3 = 36$	$5 + 11 = 16$	$19 + 4 = 23$
$36 - 14 = 22$	$16 : 4 = 4$	$23 - 19 = 4$
$22 + 13 = 35$	$4 : 4 = 1$	$4 + 15 = 19$
$35 : 7 = 5$	$1 + 15 = 16$	$19 - 5 = 14$
$5 + 16 = 21$	$16 + 17 = 33$	$14 : 2 = 7$
$21 * 1 = 21$	$33 * 3 = 99$	$7 + 13 = 20$
$21 - 17 = 4$	$99 : 3 = 33$	$20 : 4 = 5$
$4 * 1 = 4$	$33 + 17 = 50$	$5 * 3 = 15$
$4 * 1 = 4$	$50 : 5 = 10$	
	$9 + 7 = 16$	

## Kopfrechnen (44)

$11 + 3 = 14$

$14 * 1 = 14$

$14 + 1 = 15$

$15 - 15 = 0$

$0 + 20 = 20$

$20 + 15 = 35$

$35 : 7 = 5$

$5 - 2 = 3$

$3 + 11 = 14$

$14 + 3 = 17$

$17 + 18 = 35$

$35 - 8 = 27$

$27 * 2 = 54$

$54 : 2 = 27$

$27 + 5 = 32$

$32 + 15 = 47$

$47 * 1 = 47$

$47 + 6 = 53$

$53 - 9 = 44$

$44 + 8 = 52$

$52 : 13 = 4$

$4 + 1 = 5$

$5 - 2 = 3$

$3 * 3 = 9$

$9 * 2 = 18$

$18 + 11 = 29$

$29 - 19 = 10$

$10 + 2 = 12$

$12 : 3 = 4$

$4 + 11 = 15$

$15 + 17 = 32$

$32 : 4 = 8$

$8 : 8 = 1$

$1 * 3 = 3$

$3 + 12 = 15$

$15 * 1 = 15$

$15 + 17 = 32$

$32 * 1 = 32$

$5 + 1 = 6$

$6 + 2 = 8$

$8 + 13 = 21$

$21 + 18 = 39$

$39 * 1 = 39$

$39 + 18 = 57$

$57 : 3 = 19$

$19 - 1 = 18$

$18 * 1 = 18$

$18 : 3 = 6$

$6 * 3 = 18$

$18 : 2 = 9$

$9 + 2 = 11$

$11 - 8 = 3$

$3 * 3 = 9$

$9 + 13 = 22$

$22 + 10 = 32$

$32 * 3 = 96$

$96 - 13 = 83$

$83 + 1 = 84$

$84 * 3 = 252$

$252 - 15 = 237$

$237 - 16 = 221$

$221 - 7 = 214$

$214 * 1 = 214$

$214 + 6 = 220$

$220 : 5 = 44$

$44 : 11 = 4$

$4 : 2 = 2$

$2 * 3 = 6$

$6 * 1 = 6$

$6 * 2 = 12$

$12 : 4 = 3$

$3 * 3 = 9$

$9 * 1 = 9$

$9 * 2 = 18$

$18 * 3 = 54$

$54 : 3 = 18$

$9 + 15 = 24$

$24 : 4 = 6$

$6 : 3 = 2$

$2 * 3 = 6$

$6 * 3 = 18$

$18 - 1 = 17$

$17 * 1 = 17$

$17 - 13 = 4$

$4 * 3 = 12$

$12 : 12 = 1$

$1 + 20 = 21$

$21 + 12 = 33$

$33 - 19 = 14$

$14 : 2 = 7$

$7 + 7 = 14$

$14 + 12 = 26$

$26 + 20 = 46$

$46 - 16 = 30$

$30 : 3 = 10$

$10 - 3 = 7$

$7 : 7 = 1$

$1 + 1 = 2$

$2 + 18 = 20$

$20 + 2 = 22$

$22 - 9 = 13$

$13 + 2 = 15$

$15 : 3 = 5$

$5 * 3 = 15$

$15 + 9 = 24$

$24 : 6 = 4$

$4 * 1 = 4$

$4 * 1 = 4$

$4 * 2 = 8$

$8 : 8 = 1$

$1 * 1 = 1$

$1 + 16 = 17$

$17 + 13 = 30$

$30 : 10 = 3$

## Kopfrechnen (45)

11 + 3 = 14  
14 + 1 = 15  
15 + 17 = 32  
32 \* 1 = 32  
32 : 4 = 8  
8 + 13 = 21  
21 \* 2 = 42  
42 + 10 = 52  
52 : 2 = 26  
26 \* 1 = 26  
26 : 2 = 13  
13 \* 1 = 13  
13 + 15 = 28  
28 + 20 = 48  
48 - 20 = 28  
28 + 2 = 30  
30 \* 2 = 60  
60 - 9 = 51  
51 : 3 = 17  
17 - 13 = 4  
4 \* 1 = 4  
4 - 2 = 2  
2 : 2 = 1  
1 \* 3 = 3  
3 : 3 = 1  
1 \* 2 = 2  
2 : 2 = 1  
1 \* 3 = 3  
3 \* 3 = 9  
9 + 9 = 18  
18 + 16 = 34  
34 \* 3 = 102  
102 \* 2 = 204  
204 : 6 = 34  
34 - 19 = 15  
15 + 15 = 30  
30 \* 2 = 60  
60 - 15 = 45

10 + 13 = 23  
23 \* 1 = 23  
23 - 7 = 16  
16 : 8 = 2  
2 + 4 = 6  
6 - 3 = 3  
3 : 3 = 1  
1 + 17 = 18  
18 \* 1 = 18  
18 + 9 = 27  
27 : 9 = 3  
3 : 3 = 1  
1 \* 3 = 3  
3 : 3 = 1  
1 \* 3 = 3  
3 + 13 = 16  
16 + 18 = 34  
34 - 10 = 24  
24 - 12 = 12  
12 + 6 = 18  
18 - 4 = 14  
14 + 19 = 33  
33 - 16 = 17  
17 + 18 = 35  
35 + 6 = 41  
41 + 4 = 45  
45 \* 1 = 45  
45 \* 2 = 90  
90 + 9 = 99  
99 \* 2 = 198  
198 : 2 = 99  
99 - 3 = 96  
96 - 2 = 94  
94 - 20 = 74  
74 - 5 = 69  
69 + 15 = 84  
84 \* 3 = 252  
252 \* 3 = 756  
12 + 17 = 29

29 \* 1 = 29  
29 \* 2 = 58  
58 : 2 = 29  
29 + 5 = 34  
34 + 11 = 45  
45 + 9 = 54  
54 + 2 = 56  
56 \* 1 = 56  
56 + 10 = 66  
66 : 11 = 6  
6 + 2 = 8  
8 : 8 = 1  
1 + 11 = 12  
12 + 16 = 28  
28 \* 1 = 28  
28 + 2 = 30  
30 + 14 = 44  
44 \* 1 = 44  
44 \* 2 = 88  
88 + 19 = 107  
107 - 20 = 87  
87 : 3 = 29  
29 \* 2 = 58  
58 \* 3 = 174  
174 - 10 = 164  
164 \* 1 = 164  
164 : 2 = 82  
82 - 5 = 77  
77 + 16 = 93  
93 - 16 = 77  
77 + 3 = 80  
80 - 6 = 74  
74 + 15 = 89  
89 + 1 = 90  
90 \* 3 = 270  
270 + 19 = 289  
289 - 15 = 274

## Kopfrechnen (46)

$11 + 4 = 15$	$2 + 7 = 9$	$23 - 9 = 14$
$15 * 3 = 45$	$9 * 2 = 18$	$14 - 11 = 3$
$45 - 2 = 43$	$18 - 1 = 17$	$3 * 1 = 3$
$43 * 2 = 86$	$17 - 2 = 15$	$3 + 20 = 23$
$86 - 9 = 77$	$15 - 7 = 8$	$23 + 9 = 32$
$77 + 3 = 80$	$8 + 9 = 17$	$32 + 9 = 41$
$80 - 2 = 78$	$17 + 13 = 30$	$41 - 1 = 40$
$78 - 14 = 64$	$30 : 10 = 3$	$40 + 12 = 52$
$64 - 5 = 59$	$3 * 1 = 3$	$52 + 9 = 61$
$59 + 5 = 64$	$3 : 3 = 1$	$61 - 15 = 46$
$64 : 8 = 8$	$1 + 9 = 10$	$46 * 1 = 46$
$8 + 1 = 9$	$10 - 10 = 0$	$46 : 2 = 23$
$9 * 2 = 18$	$0 + 10 = 10$	$23 + 13 = 36$
$18 : 6 = 3$	$10 : 2 = 5$	$36 : 9 = 4$
$3 + 11 = 14$	$5 : 5 = 1$	$4 : 4 = 1$
$14 : 7 = 2$	$1 + 7 = 8$	$1 + 9 = 10$
$2 * 3 = 6$	$8 * 1 = 8$	$10 + 13 = 23$
$6 : 2 = 3$	$8 * 3 = 24$	$23 - 14 = 9$
$3 + 3 = 6$	$24 * 1 = 24$	$9 : 9 = 1$
$6 + 15 = 21$	$24 * 2 = 48$	$1 * 2 = 2$
$21 : 7 = 3$	$48 + 17 = 65$	$2 + 9 = 11$
$3 * 2 = 6$	$65 * 1 = 65$	$11 : 11 = 1$
$6 - 5 = 1$	$65 * 2 = 130$	$1 * 1 = 1$
$1 * 1 = 1$	$130 * 3 = 390$	$1 * 2 = 2$
$1 + 1 = 2$	$390 - 8 = 382$	$2 + 5 = 7$
$2 * 3 = 6$	$382 : 2 = 191$	$7 - 3 = 4$
$6 + 9 = 15$	$191 * 2 = 382$	$4 + 5 = 9$
$15 * 2 = 30$	$382 + 1 = 383$	$9 + 4 = 13$
$30 + 19 = 49$	$383 - 16 = 367$	$13 - 3 = 10$
$49 - 5 = 44$	$367 * 1 = 367$	$10 + 10 = 20$
$44 * 3 = 132$	$367 + 6 = 373$	$20 - 1 = 19$
$132 + 4 = 136$	$373 - 20 = 353$	$19 * 2 = 38$
$136 : 4 = 34$	$353 - 16 = 337$	$38 + 7 = 45$
$34 : 2 = 17$	$337 + 10 = 347$	$45 * 1 = 45$
$17 * 3 = 51$	$347 * 1 = 347$	$45 - 11 = 34$
$51 + 10 = 61$	$347 * 2 = 694$	$34 : 2 = 17$
$61 + 14 = 75$	$694 * 1 = 694$	$17 - 12 = 5$
$75 : 5 = 15$	$694 : 2 = 347$	
	$4 + 19 = 23$	

## Kopfrechnen (47)

$6 + 19 = 25$	$12 + 14 = 26$	$23 + 6 = 29$
$25 - 14 = 11$	$26 * 2 = 52$	$29 * 1 = 29$
$11 : 11 = 1$	$52 : 2 = 26$	$29 - 15 = 14$
$1 * 3 = 3$	$26 * 2 = 52$	$14 * 3 = 42$
$3 + 11 = 14$	$52 * 2 = 104$	$42 - 1 = 41$
$14 : 2 = 7$	$104 - 10 = 94$	$41 * 3 = 123$
$7 * 2 = 14$	$94 + 14 = 108$	$123 * 1 = 123$
$14 - 2 = 12$	$108 + 1 = 109$	$123 * 3 = 369$
$12 * 3 = 36$	$109 - 1 = 108$	$369 + 18 = 387$
$36 : 4 = 9$	$108 * 3 = 324$	$387 * 2 = 774$
$9 : 9 = 1$	$324 * 1 = 324$	$774 : 3 = 258$
$1 * 1 = 1$	$324 - 8 = 316$	$258 + 19 = 277$
$1 + 13 = 14$	$316 : 2 = 158$	$277 - 18 = 259$
$14 * 1 = 14$	$158 : 2 = 79$	$259 + 18 = 277$
$14 * 1 = 14$	$79 + 8 = 87$	$277 - 4 = 273$
$14 * 2 = 28$	$87 - 14 = 73$	$273 + 19 = 292$
$28 * 1 = 28$	$73 - 17 = 56$	$292 * 3 = 876$
$28 * 3 = 84$	$56 : 7 = 8$	$876 : 4 = 219$
$84 + 3 = 87$	$8 : 8 = 1$	$219 * 1 = 219$
$87 + 20 = 107$	$1 + 7 = 8$	$219 * 1 = 219$
$107 * 3 = 321$	$8 : 4 = 2$	$219 + 7 = 226$
$321 - 16 = 305$	$2 : 2 = 1$	$226 + 5 = 231$
$305 - 1 = 304$	$1 * 2 = 2$	$231 + 4 = 235$
$304 + 2 = 306$	$2 : 2 = 1$	$235 * 1 = 235$
$306 : 3 = 102$	$1 * 2 = 2$	$235 * 2 = 470$
$102 - 9 = 93$	$2 * 2 = 4$	$470 + 11 = 481$
$93 - 2 = 91$	$4 * 3 = 12$	$481 - 13 = 468$
$91 * 3 = 273$	$12 - 3 = 9$	$468 * 1 = 468$
$273 + 13 = 286$	$9 - 6 = 3$	$468 : 3 = 156$
$286 - 20 = 266$	$3 : 3 = 1$	$156 - 3 = 153$
$266 * 3 = 798$	$1 + 20 = 21$	$153 * 1 = 153$
$798 - 16 = 782$	$21 * 2 = 42$	$153 - 20 = 133$
$782 + 15 = 797$	$42 - 7 = 35$	$133 + 20 = 153$
$797 + 13 = 810$	$35 + 7 = 42$	$153 - 5 = 148$
$810 + 10 = 820$	$42 - 17 = 25$	$148 * 1 = 148$
$820 : 10 = 82$	$25 * 1 = 25$	$148 + 12 = 160$
$82 * 1 = 82$	$25 : 5 = 5$	$160 - 14 = 146$
$82 + 9 = 91$	$5 + 12 = 17$	
	$9 + 14 = 23$	

## Kopfrechnen (48)

$9 + 8 = 17$	$4 + 17 = 21$	$22 + 19 = 41$
$17 * 1 = 17$	$21 - 5 = 16$	$41 * 2 = 82$
$17 - 13 = 4$	$16 : 4 = 4$	$82 * 3 = 246$
$4 * 3 = 12$	$4 * 2 = 8$	$246 : 2 = 123$
$12 * 1 = 12$	$8 + 15 = 23$	$123 : 3 = 41$
$12 : 3 = 4$	$23 + 4 = 27$	$41 + 3 = 44$
$4 : 2 = 2$	$27 : 3 = 9$	$44 - 4 = 40$
$2 + 16 = 18$	$9 + 12 = 21$	$40 * 1 = 40$
$18 : 2 = 9$	$21 : 3 = 7$	$40 : 8 = 5$
$9 * 2 = 18$	$7 - 3 = 4$	$5 + 6 = 11$
$18 * 3 = 54$	$4 + 13 = 17$	$11 - 3 = 8$
$54 - 10 = 44$	$17 + 16 = 33$	$8 * 3 = 24$
$44 : 4 = 11$	$33 * 1 = 33$	$24 * 1 = 24$
$11 - 6 = 5$	$33 * 3 = 99$	$24 - 17 = 7$
$5 + 17 = 22$	$99 * 3 = 297$	$7 + 10 = 17$
$22 * 1 = 22$	$297 : 9 = 33$	$17 + 6 = 23$
$22 * 3 = 66$	$33 + 18 = 51$	$17 + 6 = 23$
$66 + 2 = 68$	$51 - 5 = 46$	$23 - 7 = 16$
$68 * 3 = 204$	$46 + 10 = 56$	$16 - 15 = 1$
$204 + 6 = 210$	$56 : 2 = 28$	$1 + 12 = 13$
$210 : 10 = 21$	$28 * 3 = 84$	$13 - 12 = 1$
$21 + 11 = 32$	$84 - 16 = 68$	$1 * 1 = 1$
$32 + 9 = 41$	$68 * 2 = 136$	$1 + 9 = 10$
$41 * 1 = 41$	$136 - 18 = 118$	$10 + 3 = 13$
$41 + 5 = 46$	$118 : 2 = 59$	$13 * 3 = 39$
$46 * 2 = 92$	$59 - 14 = 45$	$39 : 3 = 13$
$92 * 2 = 184$	$45 * 2 = 90$	$13 * 3 = 39$
$184 * 3 = 552$	$90 - 3 = 87$	$39 + 14 = 53$
$552 + 10 = 562$	$87 * 3 = 261$	$53 + 15 = 68$
$562 + 7 = 569$	$261 - 11 = 250$	$68 - 15 = 53$
$569 + 8 = 577$	$250 + 11 = 261$	$53 * 3 = 159$
$577 + 6 = 583$	$261 : 9 = 29$	$159 - 14 = 145$
$583 * 3 = 1749$	$29 + 13 = 42$	$145 : 5 = 29$
$1749 : 11 = 159$	$42 - 8 = 34$	$29 * 1 = 29$
$159 * 2 = 318$	$34 * 3 = 102$	$29 + 17 = 46$
$318 : 3 = 106$	$102 : 6 = 17$	$46 + 7 = 53$
$106 - 3 = 103$	$17 - 8 = 9$	$53 + 15 = 68$
$103 * 3 = 309$	$9 : 3 = 3$	$68 * 3 = 204$
	$5 + 17 = 22$	



## Kopfrechnen (49)

$12 + 1 = 13$	$9 + 8 = 17$	$17 * 2 = 34$
$13 + 6 = 19$	$17 - 16 = 1$	$34 : 2 = 17$
$19 + 16 = 35$	$1 + 8 = 9$	$17 - 11 = 6$
$35 + 3 = 38$	$9 + 10 = 19$	$6 + 5 = 11$
$38 + 1 = 39$	$19 * 1 = 19$	$11 - 3 = 8$
$39 * 2 = 78$	$19 - 17 = 2$	$8 : 2 = 4$
$78 : 6 = 13$	$2 : 2 = 1$	$4 * 3 = 12$
$13 + 14 = 27$	$1 + 19 = 20$	$12 * 3 = 36$
$27 - 5 = 22$	$20 - 17 = 3$	$36 * 3 = 108$
$22 * 2 = 44$	$3 + 19 = 22$	$108 * 1 = 108$
$44 + 6 = 50$	$22 * 2 = 44$	$108 : 9 = 12$
$50 * 3 = 150$	$44 : 11 = 4$	$12 : 4 = 3$
$150 + 16 = 166$	$4 * 3 = 12$	$3 + 10 = 13$
$166 - 9 = 157$	$12 + 3 = 15$	$13 + 20 = 33$
$157 * 1 = 157$	$15 : 3 = 5$	$33 - 17 = 16$
$157 - 4 = 153$	$5 - 3 = 2$	$16 + 8 = 24$
$153 * 3 = 459$	$2 : 2 = 1$	$24 : 4 = 6$
$459 : 3 = 153$	$1 + 18 = 19$	$6 * 2 = 12$
$153 - 7 = 146$	$19 * 1 = 19$	$12 + 2 = 14$
$146 + 3 = 149$	$19 + 19 = 38$	$14 : 2 = 7$
$149 * 2 = 298$	$38 * 2 = 76$	$7 : 7 = 1$
$298 * 2 = 596$	$76 + 9 = 85$	$1 + 7 = 8$
$596 : 4 = 149$	$85 : 5 = 17$	$8 * 2 = 16$
$149 + 5 = 154$	$17 + 12 = 29$	$16 * 1 = 16$
$154 - 9 = 145$	$29 - 6 = 23$	$16 * 1 = 16$
$145 + 3 = 148$	$23 * 3 = 69$	$16 - 1 = 15$
$148 + 5 = 153$	$69 * 3 = 207$	$15 * 2 = 30$
$153 * 3 = 459$	$207 - 5 = 202$	$30 * 1 = 30$
$459 - 11 = 448$	$202 - 3 = 199$	$30 : 3 = 10$
$448 + 16 = 464$	$199 * 1 = 199$	$10 : 10 = 1$
$464 - 9 = 455$	$199 - 20 = 179$	$1 + 9 = 10$
$455 : 13 = 35$	$179 * 2 = 358$	$10 + 9 = 19$
$35 + 13 = 48$	$358 * 1 = 358$	$19 + 12 = 31$
$48 * 1 = 48$	$358 - 10 = 348$	$31 * 1 = 31$
$48 : 2 = 24$	$348 : 4 = 87$	$31 + 16 = 47$
$24 : 3 = 8$	$87 + 16 = 103$	$47 + 5 = 52$
$8 * 1 = 8$	$103 + 17 = 120$	$52 - 4 = 48$
$8 + 13 = 21$	$120 * 2 = 240$	
	$4 + 13 = 17$	

## Kopfrechnen (50)

$8 + 12 = 20$   
 $20 : 2 = 10$   
 $10 + 14 = 24$   
 $24 : 8 = 3$   
 $3 * 1 = 3$   
 $3 - 1 = 2$   
 $2 * 1 = 2$   
 $2 + 3 = 5$   
 $5 + 10 = 15$   
 $15 + 2 = 17$   
 $17 - 5 = 12$   
 $12 + 15 = 27$   
 $27 : 9 = 3$   
 $3 : 3 = 1$   
 $1 + 20 = 21$   
 $21 - 16 = 5$   
 $5 + 9 = 14$   
 $14 : 7 = 2$   
 $2 : 2 = 1$   
 $1 + 9 = 10$   
 $10 + 7 = 17$   
 $17 + 7 = 24$   
 $24 : 6 = 4$   
 $4 + 7 = 11$   
 $11 : 11 = 1$   
 $1 + 1 = 2$   
 $2 * 2 = 4$   
 $4 + 10 = 14$   
 $14 : 7 = 2$   
 $2 * 3 = 6$   
 $6 : 6 = 1$   
 $1 * 3 = 3$   
 $3 * 2 = 6$   
 $6 * 2 = 12$   
 $12 - 11 = 1$   
 $1 + 1 = 2$   
 $2 + 19 = 21$   
 $21 + 18 = 39$

$7 + 6 = 13$   
 $13 : 13 = 1$   
 $1 + 13 = 14$   
 $14 * 2 = 28$   
 $28 : 7 = 4$   
 $4 * 1 = 4$   
 $4 : 4 = 1$   
 $1 * 3 = 3$   
 $3 - 3 = 0$   
 $0 + 5 = 5$   
 $5 + 12 = 17$   
 $17 - 10 = 7$   
 $7 + 19 = 26$   
 $26 * 1 = 26$   
 $26 + 17 = 43$   
 $43 + 18 = 61$   
 $61 + 20 = 81$   
 $81 + 15 = 96$   
 $96 - 6 = 90$   
 $90 + 15 = 105$   
 $105 + 10 = 115$   
 $115 : 5 = 23$   
 $23 - 4 = 19$   
 $19 + 10 = 29$   
 $29 * 1 = 29$   
 $29 * 3 = 87$   
 $87 * 1 = 87$   
 $87 + 9 = 96$   
 $96 + 14 = 110$   
 $110 : 2 = 55$   
 $55 * 2 = 110$   
 $110 : 5 = 22$   
 $22 + 9 = 31$   
 $31 + 14 = 45$   
 $45 : 3 = 15$   
 $15 * 2 = 30$   
 $30 - 2 = 28$   
 $28 + 20 = 48$   
 $10 + 4 = 14$

$14 - 5 = 9$   
 $9 * 2 = 18$   
 $18 * 2 = 36$   
 $36 : 6 = 6$   
 $6 : 2 = 3$   
 $3 + 9 = 12$   
 $12 : 3 = 4$   
 $4 : 4 = 1$   
 $1 + 5 = 6$   
 $6 + 9 = 15$   
 $15 * 2 = 30$   
 $30 : 5 = 6$   
 $6 + 18 = 24$   
 $24 - 7 = 17$   
 $17 * 3 = 51$   
 $51 - 1 = 50$   
 $50 + 5 = 55$   
 $55 + 19 = 74$   
 $74 : 2 = 37$   
 $37 + 9 = 46$   
 $46 + 15 = 61$   
 $61 + 14 = 75$   
 $75 - 5 = 70$   
 $70 - 5 = 65$   
 $65 * 3 = 195$   
 $195 * 2 = 390$   
 $390 : 5 = 78$   
 $78 * 1 = 78$   
 $78 + 17 = 95$   
 $95 : 5 = 19$   
 $19 - 6 = 13$   
 $13 + 13 = 26$   
 $26 * 2 = 52$   
 $52 : 4 = 13$   
 $13 + 11 = 24$   
 $24 * 2 = 48$   
 $48 * 1 = 48$

## Kopfrechnen (51)

$6 + 10 = 16$   
 $16 + 1 = 17$   
 $17 * 3 = 51$   
 $51 * 2 = 102$   
 $102 * 1 = 102$   
 $102 + 7 = 109$   
 $109 * 3 = 327$   
 $327 + 16 = 343$   
 $343 : 7 = 49$   
 $49 : 7 = 7$   
 $7 - 6 = 1$   
 $1 * 3 = 3$   
 $3 * 3 = 9$   
 $9 * 3 = 27$   
 $27 - 15 = 12$   
 $12 * 3 = 36$   
 $36 - 11 = 25$   
 $25 * 1 = 25$   
 $25 + 17 = 42$   
 $42 + 6 = 48$   
 $48 - 2 = 46$   
 $46 + 15 = 61$   
 $61 * 1 = 61$   
 $61 * 2 = 122$   
 $122 : 2 = 61$   
 $61 - 7 = 54$   
 $54 - 13 = 41$   
 $41 * 3 = 123$   
 $123 : 3 = 41$   
 $41 - 9 = 32$   
 $32 * 2 = 64$   
 $64 + 5 = 69$   
 $69 * 1 = 69$   
 $69 - 5 = 64$   
 $64 - 20 = 44$   
 $44 - 16 = 28$   
 $28 + 13 = 41$   
 $41 + 17 = 58$

$8 + 7 = 15$   
 $15 + 13 = 28$   
 $28 - 6 = 22$   
 $22 : 2 = 11$   
 $11 + 7 = 18$   
 $18 + 6 = 24$   
 $24 - 4 = 20$   
 $20 + 5 = 25$   
 $25 : 5 = 5$   
 $5 : 5 = 1$   
 $1 * 2 = 2$   
 $2 + 5 = 7$   
 $7 : 7 = 1$   
 $1 + 17 = 18$   
 $18 * 1 = 18$   
 $18 * 2 = 36$   
 $36 : 9 = 4$   
 $4 : 4 = 1$   
 $1 * 3 = 3$   
 $3 + 3 = 6$   
 $6 : 3 = 2$   
 $2 + 12 = 14$   
 $14 : 7 = 2$   
 $2 : 2 = 1$   
 $1 - 1 = 0$   
 $0 + 6 = 6$   
 $6 : 3 = 2$   
 $2 * 2 = 4$   
 $4 + 3 = 7$   
 $7 : 7 = 1$   
 $1 + 18 = 19$   
 $19 + 9 = 28$   
 $28 - 18 = 10$   
 $10 + 19 = 29$   
 $29 - 17 = 12$   
 $12 : 3 = 4$   
 $4 : 4 = 1$   
 $1 * 3 = 3$   
 $11 + 13 = 24$

$24 - 12 = 12$   
 $12 - 12 = 0$   
 $0 + 3 = 3$   
 $3 : 3 = 1$   
 $1 * 1 = 1$   
 $1 + 6 = 7$   
 $7 : 7 = 1$   
 $1 + 17 = 18$   
 $18 + 1 = 19$   
 $19 * 1 = 19$   
 $19 + 8 = 27$   
 $27 + 10 = 37$   
 $37 + 6 = 43$   
 $43 + 3 = 46$   
 $46 + 9 = 55$   
 $55 - 14 = 41$   
 $41 + 12 = 53$   
 $53 - 5 = 48$   
 $48 : 6 = 8$   
 $8 * 3 = 24$   
 $24 - 18 = 6$   
 $6 : 3 = 2$   
 $2 + 2 = 4$   
 $4 + 12 = 16$   
 $16 : 4 = 4$   
 $4 : 4 = 1$   
 $1 * 2 = 2$   
 $2 * 2 = 4$   
 $4 * 3 = 12$   
 $12 * 3 = 36$   
 $36 : 12 = 3$   
 $3 + 11 = 14$   
 $14 - 1 = 13$   
 $13 * 3 = 39$   
 $39 - 2 = 37$   
 $37 * 2 = 74$   
 $74 : 2 = 37$

## Kopfrechnen (52)

$10 + 16 = 26$	$8 + 10 = 18$	$26 * 2 = 52$
$26 + 20 = 46$	$18 * 1 = 18$	$52 + 12 = 64$
$46 + 10 = 56$	$18 - 6 = 12$	$64 * 2 = 128$
$56 : 7 = 8$	$12 * 2 = 24$	$128 : 2 = 64$
$8 * 3 = 24$	$24 * 3 = 72$	$64 + 20 = 84$
$24 * 1 = 24$	$72 : 4 = 18$	$84 - 13 = 71$
$24 + 10 = 34$	$18 - 18 = 0$	$71 * 2 = 142$
$34 * 1 = 34$	$0 + 15 = 15$	$142 * 3 = 426$
$34 + 14 = 48$	$15 + 11 = 26$	$426 - 20 = 406$
$48 + 1 = 49$	$26 + 7 = 33$	$406 - 18 = 388$
$49 + 17 = 66$	$33 * 1 = 33$	$388 : 2 = 194$
$66 * 1 = 66$	$33 * 2 = 66$	$194 + 6 = 200$
$66 + 10 = 76$	$66 + 18 = 84$	$200 + 2 = 202$
$76 + 13 = 89$	$84 + 4 = 88$	$202 : 2 = 101$
$89 - 17 = 72$	$88 : 8 = 11$	$101 + 20 = 121$
$72 * 2 = 144$	$11 + 12 = 23$	$121 + 2 = 123$
$144 - 11 = 133$	$23 * 1 = 23$	$123 + 20 = 143$
$133 : 7 = 19$	$23 * 3 = 69$	$143 * 2 = 286$
$19 - 13 = 6$	$69 - 10 = 59$	$286 * 2 = 572$
$6 : 2 = 3$	$59 + 7 = 66$	$572 - 15 = 557$
$3 + 17 = 20$	$66 - 3 = 63$	$557 * 3 = 1671$
$20 + 20 = 40$	$63 * 1 = 63$	$1671 - 14 = 1657$
$40 - 7 = 33$	$63 - 5 = 58$	$1657 + 12 = 1669$
$33 + 6 = 39$	$58 + 18 = 76$	$1669 - 20 = 1649$
$39 + 15 = 54$	$76 + 8 = 84$	$1649 * 3 = 4947$
$54 : 3 = 18$	$84 - 6 = 78$	$4947 - 18 = 4929$
$18 - 3 = 15$	$78 - 8 = 70$	$4929 : 3 = 1643$
$15 + 17 = 32$	$70 : 2 = 35$	$1643 - 12 = 1631$
$32 - 17 = 15$	$35 : 7 = 5$	$1631 + 18 = 1649$
$15 + 20 = 35$	$5 * 1 = 5$	$1649 - 6 = 1643$
$35 : 7 = 5$	$5 : 5 = 1$	$1643 * 2 = 3286$
$5 + 2 = 7$	$1 * 3 = 3$	$3286 + 17 = 3303$
$7 + 3 = 10$	$3 + 8 = 11$	$3303 + 9 = 3312$
$10 : 10 = 1$	$11 + 15 = 26$	$3312 + 15 = 3327$
$1 * 2 = 2$	$26 * 3 = 78$	$3327 * 3 = 9981$
$2 + 8 = 10$	$78 : 13 = 6$	$9981 * 2 = 19962$
$10 * 3 = 30$	$6 : 6 = 1$	$19962 : 6 = 3327$
$30 - 3 = 27$	$1 * 3 = 3$	
	$11 + 15 = 26$	

## Kopfrechnen (53)

$6 + 7 = 13$	$1 + 10 = 11$	$28 + 14 = 42$
$13 * 2 = 26$	$11 + 15 = 26$	$42 : 2 = 21$
$26 - 17 = 9$	$26 * 3 = 78$	$21 - 10 = 11$
$9 * 1 = 9$	$78 * 3 = 234$	$11 : 11 = 1$
$9 : 3 = 3$	$234 * 3 = 702$	$1 + 15 = 16$
$3 : 3 = 1$	$702 - 13 = 689$	$16 : 4 = 4$
$1 + 17 = 18$	$689 + 11 = 700$	$4 + 19 = 23$
$18 : 9 = 2$	$700 + 18 = 718$	$23 * 2 = 46$
$2 * 3 = 6$	$718 + 7 = 725$	$46 : 2 = 23$
$6 + 10 = 16$	$725 * 3 = 2175$	$23 * 2 = 46$
$16 + 13 = 29$	$2175 - 11 = 2164$	$46 * 1 = 46$
$29 + 13 = 42$	$2164 : 2 = 1082$	$46 + 19 = 65$
$42 * 1 = 42$	$1082 - 9 = 1073$	$65 * 3 = 195$
$42 - 12 = 30$	$1073 - 19 = 1054$	$195 - 20 = 175$
$30 * 2 = 60$	$1054 + 1 = 1055$	$175 + 6 = 181$
$60 - 15 = 45$	$1055 + 20 = 1075$	$181 * 1 = 181$
$45 : 5 = 9$	$1075 + 2 = 1077$	$181 * 1 = 181$
$9 - 1 = 8$	$1077 + 17 = 1094$	$181 - 7 = 174$
$8 : 4 = 2$	$1094 * 2 = 2188$	$174 * 2 = 348$
$2 * 3 = 6$	$2188 - 12 = 2176$	$348 * 2 = 696$
$6 - 6 = 0$	$2176 : 8 = 272$	$696 + 13 = 709$
$0 + 7 = 7$	$272 + 18 = 290$	$709 + 5 = 714$
$7 * 2 = 14$	$290 - 19 = 271$	$714 - 3 = 711$
$14 + 18 = 32$	$271 + 19 = 290$	$711 - 11 = 700$
$32 : 4 = 8$	$290 - 1 = 289$	$700 : 5 = 140$
$8 * 1 = 8$	$289 * 1 = 289$	$140 : 4 = 35$
$8 + 20 = 28$	$289 - 13 = 276$	$35 - 2 = 33$
$28 * 3 = 84$	$276 : 6 = 46$	$33 * 3 = 99$
$84 : 3 = 28$	$46 : 2 = 23$	$99 * 2 = 198$
$28 * 3 = 84$	$23 + 17 = 40$	$198 + 4 = 202$
$84 : 2 = 42$	$40 : 10 = 4$	$202 : 2 = 101$
$42 + 14 = 56$	$4 * 2 = 8$	$101 - 5 = 96$
$56 * 3 = 168$	$8 * 1 = 8$	$96 - 16 = 80$
$168 * 1 = 168$	$8 * 1 = 8$	$80 + 18 = 98$
$168 - 6 = 162$	$8 + 15 = 23$	$98 : 7 = 14$
$162 - 11 = 151$	$23 + 14 = 37$	$14 + 8 = 22$
$151 * 2 = 302$	$37 + 18 = 55$	$22 - 11 = 11$
$302 * 3 = 906$	$55 * 1 = 55$	
	$11 + 17 = 28$	

## Kopfrechnen (54)

$2 + 17 = 19$

$19 + 6 = 25$

$25 * 2 = 50$

$50 + 4 = 54$

$54 - 14 = 40$

$40 - 7 = 33$

$33 - 4 = 29$

$29 * 1 = 29$

$29 * 2 = 58$

$58 - 15 = 43$

$43 * 1 = 43$

$43 + 19 = 62$

$62 : 2 = 31$

$31 * 1 = 31$

$31 + 5 = 36$

$36 + 18 = 54$

$54 + 14 = 68$

$68 * 2 = 136$

$136 * 1 = 136$

$136 : 8 = 17$

$17 - 8 = 9$

$9 + 2 = 11$

$11 - 8 = 3$

$3 * 3 = 9$

$9 - 7 = 2$

$2 + 11 = 13$

$13 + 2 = 15$

$15 : 3 = 5$

$5 + 20 = 25$

$25 - 8 = 17$

$17 + 3 = 20$

$20 - 8 = 12$

$12 + 20 = 32$

$32 - 18 = 14$

$14 + 20 = 34$

$34 * 1 = 34$

$34 : 2 = 17$

$17 + 15 = 32$

$12 + 14 = 26$

$26 * 3 = 78$

$78 - 17 = 61$

$61 + 17 = 78$

$78 * 1 = 78$

$78 * 3 = 234$

$234 * 2 = 468$

$468 : 4 = 117$

$117 + 11 = 128$

$128 - 20 = 108$

$108 * 1 = 108$

$108 - 17 = 91$

$91 - 6 = 85$

$85 + 2 = 87$

$87 + 14 = 101$

$101 - 20 = 81$

$81 + 5 = 86$

$86 : 2 = 43$

$43 + 4 = 47$

$47 + 3 = 50$

$50 : 10 = 5$

$5 : 5 = 1$

$1 * 2 = 2$

$2 + 9 = 11$

$11 + 6 = 17$

$17 * 3 = 51$

$51 : 3 = 17$

$17 - 11 = 6$

$6 * 1 = 6$

$6 : 3 = 2$

$2 * 3 = 6$

$6 : 2 = 3$

$3 + 5 = 8$

$8 * 1 = 8$

$8 - 1 = 7$

$7 - 5 = 2$

$2 - 2 = 0$

$0 + 9 = 9$

$12 + 11 = 23$

$23 * 1 = 23$

$23 * 2 = 46$

$46 - 5 = 41$

$41 + 8 = 49$

$49 : 7 = 7$

$7 * 1 = 7$

$7 : 7 = 1$

$1 * 2 = 2$

$2 + 2 = 4$

$4 : 2 = 2$

$2 * 2 = 4$

$4 : 2 = 2$

$2 + 14 = 16$

$16 : 2 = 8$

$8 * 3 = 24$

$24 - 16 = 8$

$8 : 8 = 1$

$1 * 1 = 1$

$1 * 3 = 3$

$3 * 1 = 3$

$3 + 9 = 12$

$12 - 5 = 7$

$7 * 1 = 7$

$7 * 1 = 7$

$7 * 1 = 7$

$7 - 6 = 1$

$1 + 2 = 3$

$3 : 3 = 1$

$1 * 1 = 1$

$1 * 2 = 2$

$2 * 2 = 4$

$4 * 3 = 12$

$12 + 1 = 13$

$13 + 7 = 20$

$20 : 2 = 10$

$10 : 2 = 5$

$5 * 3 = 15$

## Kopfrechnen (55)

$9 + 11 = 20$

$20 : 4 = 5$

$5 + 15 = 20$

$20 - 11 = 9$

$9 - 2 = 7$

$7 + 18 = 25$

$25 + 15 = 40$

$40 : 10 = 4$

$4 : 4 = 1$

$1 + 19 = 20$

$20 + 10 = 30$

$30 : 5 = 6$

$6 : 2 = 3$

$3 * 1 = 3$

$3 + 8 = 11$

$11 + 16 = 27$

$27 : 3 = 9$

$9 - 9 = 0$

$0 + 12 = 12$

$12 - 2 = 10$

$10 + 13 = 23$

$23 * 1 = 23$

$23 * 1 = 23$

$23 * 1 = 23$

$23 - 5 = 18$

$18 : 9 = 2$

$2 + 10 = 12$

$12 : 4 = 3$

$3 * 1 = 3$

$3 + 16 = 19$

$19 * 2 = 38$

$38 * 1 = 38$

$38 * 1 = 38$

$38 + 1 = 39$

$39 + 10 = 49$

$49 * 3 = 147$

$147 * 1 = 147$

$147 * 1 = 147$

$9 + 12 = 21$

$21 + 15 = 36$

$36 * 3 = 108$

$108 + 8 = 116$

$116 : 2 = 58$

$58 * 3 = 174$

$174 * 3 = 522$

$522 + 1 = 523$

$523 + 7 = 530$

$530 * 2 = 1060$

$1060 : 5 = 212$

$212 : 4 = 53$

$53 - 14 = 39$

$39 + 6 = 45$

$45 + 17 = 62$

$62 - 8 = 54$

$54 + 14 = 68$

$68 + 9 = 77$

$77 - 4 = 73$

$73 * 2 = 146$

$146 * 2 = 292$

$292 : 4 = 73$

$73 + 11 = 84$

$84 : 2 = 42$

$42 * 3 = 126$

$126 + 5 = 131$

$131 * 2 = 262$

$262 * 3 = 786$

$786 + 14 = 800$

$800 : 4 = 200$

$200 + 7 = 207$

$207 + 8 = 215$

$215 + 6 = 221$

$221 + 13 = 234$

$234 - 20 = 214$

$214 - 14 = 200$

$200 + 9 = 209$

$209 - 17 = 192$

$9 + 13 = 22$

$22 : 11 = 2$

$2 + 8 = 10$

$10 : 5 = 2$

$2 + 1 = 3$

$3 : 3 = 1$

$1 * 2 = 2$

$2 * 3 = 6$

$6 - 5 = 1$

$1 * 2 = 2$

$2 : 2 = 1$

$1 + 10 = 11$

$11 * 3 = 33$

$33 : 11 = 3$

$3 * 2 = 6$

$6 * 1 = 6$

$6 * 3 = 18$

$18 * 3 = 54$

$54 + 10 = 64$

$64 - 17 = 47$

$47 + 8 = 55$

$55 - 5 = 50$

$50 : 10 = 5$

$5 * 2 = 10$

$10 + 2 = 12$

$12 : 6 = 2$

$2 * 1 = 2$

$2 + 8 = 10$

$10 * 3 = 30$

$30 : 6 = 5$

$5 : 5 = 1$

$1 + 11 = 12$

$12 : 3 = 4$

$4 + 12 = 16$

$16 : 8 = 2$

$2 * 2 = 4$

$4 + 17 = 21$

$21 * 3 = 63$

## Kopfrechnen (56)

$5 + 9 = 14$   
 $14 * 1 = 14$   
 $14 + 20 = 34$   
 $34 : 2 = 17$   
 $17 * 3 = 51$   
 $51 + 3 = 54$   
 $54 - 10 = 44$   
 $44 - 11 = 33$   
 $33 + 11 = 44$   
 $44 : 4 = 11$   
 $11 + 4 = 15$   
 $15 + 10 = 25$   
 $25 * 1 = 25$   
 $25 * 1 = 25$   
 $25 - 17 = 8$   
 $8 : 4 = 2$   
 $2 : 2 = 1$   
 $1 + 12 = 13$   
 $13 * 2 = 26$   
 $26 * 2 = 52$   
 $52 + 10 = 62$   
 $62 * 2 = 124$   
 $124 : 4 = 31$   
 $31 + 15 = 46$   
 $46 - 16 = 30$   
 $30 + 19 = 49$   
 $49 - 9 = 40$   
 $40 - 1 = 39$   
 $39 * 1 = 39$   
 $39 : 3 = 13$   
 $13 + 10 = 23$   
 $23 - 14 = 9$   
 $9 + 1 = 10$   
 $10 : 2 = 5$   
 $5 + 12 = 17$   
 $17 * 1 = 17$   
 $17 - 15 = 2$   
 $2 + 10 = 12$

$5 + 5 = 10$   
 $10 + 3 = 13$   
 $13 * 3 = 39$   
 $39 * 1 = 39$   
 $39 + 9 = 48$   
 $48 * 1 = 48$   
 $48 + 9 = 57$   
 $57 - 2 = 55$   
 $55 * 3 = 165$   
 $165 - 20 = 145$   
 $145 : 5 = 29$   
 $29 - 8 = 21$   
 $21 - 15 = 6$   
 $6 * 2 = 12$   
 $12 + 6 = 18$   
 $18 : 3 = 6$   
 $6 : 2 = 3$   
 $3 + 1 = 4$   
 $4 + 9 = 13$   
 $13 : 13 = 1$   
 $1 + 19 = 20$   
 $20 : 5 = 4$   
 $4 * 1 = 4$   
 $4 + 13 = 17$   
 $17 * 1 = 17$   
 $17 + 3 = 20$   
 $20 * 2 = 40$   
 $40 + 20 = 60$   
 $60 + 13 = 73$   
 $73 - 9 = 64$   
 $64 + 3 = 67$   
 $67 - 2 = 65$   
 $65 - 17 = 48$   
 $48 : 4 = 12$   
 $12 + 11 = 23$   
 $23 - 12 = 11$   
 $11 : 11 = 1$   
 $1 * 3 = 3$   
 $11 + 10 = 21$

$21 * 2 = 42$   
 $42 + 8 = 50$   
 $50 : 10 = 5$   
 $5 : 5 = 1$   
 $1 + 3 = 4$   
 $4 + 14 = 18$   
 $18 - 17 = 1$   
 $1 * 2 = 2$   
 $2 + 16 = 18$   
 $18 + 14 = 32$   
 $32 * 1 = 32$   
 $32 - 3 = 29$   
 $29 * 3 = 87$   
 $87 * 3 = 261$   
 $261 : 3 = 87$   
 $87 + 1 = 88$   
 $88 - 4 = 84$   
 $84 * 1 = 84$   
 $84 - 19 = 65$   
 $65 + 4 = 69$   
 $69 - 5 = 64$   
 $64 * 2 = 128$   
 $128 + 16 = 144$   
 $144 : 9 = 16$   
 $16 * 1 = 16$   
 $16 * 3 = 48$   
 $48 + 14 = 62$   
 $62 + 6 = 68$   
 $68 + 3 = 71$   
 $71 * 2 = 142$   
 $142 + 7 = 149$   
 $149 - 7 = 142$   
 $142 * 3 = 426$   
 $426 + 5 = 431$   
 $431 + 6 = 437$   
 $437 - 8 = 429$   
 $429 + 15 = 444$



## Kopfrechnen (57)

$$\begin{aligned}1 + 20 &= 21 \\21 - 14 &= 7 \\7 - 2 &= 5 \\5 + 15 &= 20 \\20 : 4 &= 5 \\5 * 3 &= 15 \\15 : 5 &= 3 \\3 + 18 &= 21 \\21 - 11 &= 10 \\10 * 2 &= 20 \\20 : 4 &= 5 \\5 + 7 &= 12 \\12 * 3 &= 36 \\36 : 3 &= 12 \\12 : 12 &= 1 \\1 * 1 &= 1 \\1 + 19 &= 20 \\20 - 14 &= 6 \\6 : 3 &= 2 \\2 : 2 &= 1 \\1 * 2 &= 2 \\2 + 11 &= 13 \\13 * 3 &= 39 \\39 : 3 &= 13 \\13 * 2 &= 26 \\26 * 3 &= 78 \\78 - 13 &= 65 \\65 * 1 &= 65 \\65 : 13 &= 5 \\5 * 1 &= 5 \\5 : 5 &= 1 \\1 * 1 &= 1 \\1 * 3 &= 3 \\3 * 3 &= 9 \\9 - 3 &= 6 \\6 : 6 &= 1 \\1 + 4 &= 5 \\5 * 1 &= 5\end{aligned}$$

$$\begin{aligned}1 + 3 &= 4 \\4 + 20 &= 24 \\24 - 4 &= 20 \\20 : 10 &= 2 \\2 : 2 &= 1 \\1 + 3 &= 4 \\4 + 13 &= 17 \\17 + 7 &= 24 \\24 : 3 &= 8 \\8 : 4 &= 2 \\2 + 12 &= 14 \\14 - 2 &= 12 \\12 + 20 &= 32 \\32 + 4 &= 36 \\36 - 3 &= 33 \\33 * 3 &= 99 \\99 : 9 &= 11 \\11 : 11 &= 1 \\1 + 16 &= 17 \\17 * 1 &= 17 \\17 - 15 &= 2 \\2 * 1 &= 2 \\2 * 1 &= 2 \\2 * 2 &= 4 \\4 * 2 &= 8 \\8 * 3 &= 24 \\24 : 6 &= 4 \\4 + 8 &= 12 \\12 + 2 &= 14 \\14 : 2 &= 7 \\7 * 2 &= 14 \\14 + 14 &= 28 \\28 : 2 &= 14 \\14 * 3 &= 42 \\42 + 18 &= 60 \\60 : 2 &= 30 \\30 : 5 &= 6 \\6 + 5 &= 11 \\3 + 16 &= 19\end{aligned}$$

$$\begin{aligned}19 - 12 &= 7 \\7 * 2 &= 14 \\14 + 7 &= 21 \\21 * 2 &= 42 \\42 + 12 &= 54 \\54 + 20 &= 74 \\74 : 2 &= 37 \\37 - 18 &= 19 \\19 - 15 &= 4 \\4 - 1 &= 3 \\3 + 13 &= 16 \\16 + 2 &= 18 \\18 * 1 &= 18 \\18 : 6 &= 3 \\3 * 2 &= 6 \\6 : 2 &= 3 \\3 * 3 &= 9 \\9 : 9 &= 1 \\1 * 3 &= 3 \\3 * 3 &= 9 \\9 * 1 &= 9 \\9 : 9 &= 1 \\1 * 3 &= 3 \\3 : 3 &= 1 \\1 + 12 &= 13 \\13 : 13 &= 1 \\1 + 7 &= 8 \\8 : 8 &= 1 \\1 + 18 &= 19 \\19 * 1 &= 19 \\19 - 2 &= 17 \\17 - 11 &= 6 \\6 * 3 &= 18 \\18 : 6 &= 3 \\3 * 3 &= 9 \\9 + 9 &= 18 \\18 * 2 &= 36\end{aligned}$$

## Kopfrechnen (58)

$11 + 18 = 29$

$29 * 1 = 29$

$29 + 1 = 30$

$30 - 20 = 10$

$10 + 16 = 26$

$26 * 2 = 52$

$52 - 15 = 37$

$37 + 18 = 55$

$55 - 1 = 54$

$54 : 6 = 9$

$9 * 2 = 18$

$18 * 1 = 18$

$18 - 13 = 5$

$5 + 10 = 15$

$15 + 15 = 30$

$30 : 2 = 15$

$15 * 2 = 30$

$30 - 6 = 24$

$24 : 4 = 6$

$6 * 3 = 18$

$18 + 12 = 30$

$30 * 3 = 90$

$90 : 9 = 10$

$10 + 16 = 26$

$26 * 1 = 26$

$26 : 13 = 2$

$2 + 14 = 16$

$16 * 1 = 16$

$16 + 9 = 25$

$25 - 15 = 10$

$10 + 13 = 23$

$23 - 17 = 6$

$6 - 3 = 3$

$3 + 9 = 12$

$12 - 12 = 0$

$0 + 12 = 12$

$12 + 7 = 19$

$19 * 2 = 38$

$1 + 10 = 11$

$11 : 11 = 1$

$1 + 1 = 2$

$2 * 2 = 4$

$4 * 1 = 4$

$4 * 3 = 12$

$12 : 12 = 1$

$1 + 10 = 11$

$11 : 11 = 1$

$1 + 1 = 2$

$2 + 4 = 6$

$6 : 3 = 2$

$2 + 10 = 12$

$12 * 2 = 24$

$24 * 2 = 48$

$48 : 4 = 12$

$12 + 9 = 21$

$21 - 14 = 7$

$7 * 2 = 14$

$14 - 10 = 4$

$4 + 10 = 14$

$14 + 20 = 34$

$34 : 2 = 17$

$17 + 15 = 32$

$32 + 17 = 49$

$49 : 7 = 7$

$7 + 2 = 9$

$9 + 17 = 26$

$26 - 13 = 13$

$13 * 3 = 39$

$39 * 1 = 39$

$39 * 3 = 117$

$117 + 20 = 137$

$137 - 4 = 133$

$133 * 2 = 266$

$266 : 7 = 38$

$38 - 13 = 25$

$25 - 18 = 7$

$10 + 2 = 12$

$12 : 12 = 1$

$1 + 18 = 19$

$19 - 19 = 0$

$0 + 8 = 8$

$8 - 7 = 1$

$1 * 1 = 1$

$1 + 15 = 16$

$16 * 2 = 32$

$32 + 16 = 48$

$48 : 6 = 8$

$8 * 1 = 8$

$8 : 2 = 4$

$4 + 20 = 24$

$24 - 4 = 20$

$20 + 16 = 36$

$36 : 9 = 4$

$4 : 2 = 2$

$2 + 13 = 15$

$15 * 1 = 15$

$15 + 7 = 22$

$22 : 2 = 11$

$11 + 19 = 30$

$30 : 10 = 3$

$3 + 19 = 22$

$22 * 2 = 44$

$44 * 2 = 88$

$88 : 4 = 22$

$22 + 10 = 32$

$32 * 2 = 64$

$64 - 4 = 60$

$60 - 17 = 43$

$43 * 1 = 43$

$43 - 9 = 34$

$34 - 11 = 23$

$23 * 3 = 69$

$69 * 2 = 138$

$138 * 3 = 414$

## Kopfrechnen (59)

$12 + 8 = 20$

$20 : 10 = 2$

$2 * 2 = 4$

$4 + 19 = 23$

$23 * 2 = 46$

$46 * 1 = 46$

$46 + 14 = 60$

$60 * 2 = 120$

$120 : 12 = 10$

$10 - 3 = 7$

$7 + 12 = 19$

$19 * 1 = 19$

$19 - 4 = 15$

$15 - 13 = 2$

$2 + 16 = 18$

$18 + 18 = 36$

$36 * 2 = 72$

$72 * 2 = 144$

$144 + 7 = 151$

$151 + 14 = 165$

$165 + 20 = 185$

$185 * 1 = 185$

$185 * 2 = 370$

$370 : 10 = 37$

$37 + 5 = 42$

$42 : 7 = 6$

$6 : 2 = 3$

$3 + 6 = 9$

$9 * 3 = 27$

$27 - 13 = 14$

$14 * 2 = 28$

$28 - 8 = 20$

$20 - 19 = 1$

$1 + 6 = 7$

$7 * 3 = 21$

$21 * 2 = 42$

$42 : 7 = 6$

$6 + 18 = 24$

$8 + 1 = 9$

$9 + 6 = 15$

$15 * 3 = 45$

$45 + 3 = 48$

$48 + 19 = 67$

$67 - 3 = 64$

$64 + 5 = 69$

$69 - 4 = 65$

$65 : 5 = 13$

$13 - 9 = 4$

$4 + 4 = 8$

$8 * 3 = 24$

$24 * 3 = 72$

$72 : 2 = 36$

$36 : 6 = 6$

$6 : 3 = 2$

$2 + 15 = 17$

$17 * 3 = 51$

$51 + 3 = 54$

$54 * 2 = 108$

$108 - 16 = 92$

$92 : 4 = 23$

$23 + 16 = 39$

$39 * 1 = 39$

$39 + 6 = 45$

$45 + 19 = 64$

$64 * 1 = 64$

$64 - 17 = 47$

$47 + 16 = 63$

$63 + 17 = 80$

$80 - 15 = 65$

$65 - 14 = 51$

$51 + 16 = 67$

$67 * 2 = 134$

$134 - 10 = 124$

$124 * 1 = 124$

$124 * 1 = 124$

$124 * 1 = 124$

$6 + 12 = 18$

$18 + 18 = 36$

$36 + 14 = 50$

$50 : 5 = 10$

$10 + 2 = 12$

$12 : 12 = 1$

$1 * 3 = 3$

$3 * 1 = 3$

$3 + 5 = 8$

$8 * 2 = 16$

$16 * 1 = 16$

$16 : 2 = 8$

$8 * 3 = 24$

$24 : 3 = 8$

$8 : 4 = 2$

$2 * 3 = 6$

$6 + 16 = 22$

$22 - 4 = 18$

$18 + 5 = 23$

$23 * 1 = 23$

$23 + 19 = 42$

$42 + 12 = 54$

$54 + 14 = 68$

$68 * 1 = 68$

$68 : 2 = 34$

$34 + 1 = 35$

$35 * 3 = 105$

$105 - 12 = 93$

$93 : 3 = 31$

$31 - 15 = 16$

$16 * 2 = 32$

$32 : 8 = 4$

$4 * 2 = 8$

$8 : 4 = 2$

$2 : 2 = 1$

$1 * 3 = 3$

$3 * 1 = 3$

$3 + 13 = 16$

## Kopfrechnen (60)

$6 + 13 = 19$	$12 + 1 = 13$	$13 - 10 = 3$
$19 + 5 = 24$	$13 * 2 = 26$	$3 - 3 = 0$
$24 + 17 = 41$	$26 + 20 = 46$	$0 + 17 = 17$
$41 - 14 = 27$	$46 * 3 = 138$	$17 + 15 = 32$
$27 + 5 = 32$	$138 - 5 = 133$	$32 - 13 = 19$
$32 : 4 = 8$	$133 * 2 = 266$	$19 * 1 = 19$
$8 - 8 = 0$	$266 * 1 = 266$	$19 * 3 = 57$
$0 + 18 = 18$	$266 : 2 = 133$	$57 - 12 = 45$
$18 - 18 = 0$	$133 * 1 = 133$	$45 : 3 = 15$
$0 + 18 = 18$	$133 + 14 = 147$	$15 : 3 = 5$
$18 - 2 = 16$	$147 : 3 = 49$	$5 + 14 = 19$
$16 + 5 = 21$	$49 - 16 = 33$	$19 - 17 = 2$
$21 * 2 = 42$	$33 : 11 = 3$	$2 + 11 = 13$
$42 + 12 = 54$	$3 + 18 = 21$	$13 - 11 = 2$
$54 : 2 = 27$	$21 - 1 = 20$	$2 * 3 = 6$
$27 : 3 = 9$	$20 * 2 = 40$	$6 - 6 = 0$
$9 + 17 = 26$	$40 - 8 = 32$	$0 + 15 = 15$
$26 * 3 = 78$	$32 - 10 = 22$	$15 : 5 = 3$
$78 + 4 = 82$	$22 : 2 = 11$	$3 + 7 = 10$
$82 : 2 = 41$	$11 + 1 = 12$	$10 + 11 = 21$
$41 + 8 = 49$	$12 + 3 = 15$	$21 * 2 = 42$
$49 - 15 = 34$	$15 * 1 = 15$	$42 : 2 = 21$
$34 - 19 = 15$	$15 + 16 = 31$	$21 + 18 = 39$
$15 * 2 = 30$	$31 * 2 = 62$	$39 * 3 = 117$
$30 + 12 = 42$	$62 - 13 = 49$	$117 * 2 = 234$
$42 - 5 = 37$	$49 * 3 = 147$	$234 + 16 = 250$
$37 * 3 = 111$	$147 : 3 = 49$	$250 : 5 = 50$
$111 * 2 = 222$	$49 * 3 = 147$	$50 - 17 = 33$
$222 - 16 = 206$	$147 * 2 = 294$	$33 * 3 = 99$
$206 - 16 = 190$	$294 + 12 = 306$	$99 * 2 = 198$
$190 * 2 = 380$	$306 + 9 = 315$	$198 + 3 = 201$
$380 - 4 = 376$	$315 - 16 = 299$	$201 : 3 = 67$
$376 - 2 = 374$	$299 - 13 = 286$	$67 * 1 = 67$
$374 + 16 = 390$	$286 * 3 = 858$	$67 * 3 = 201$
$390 + 15 = 405$	$858 + 2 = 860$	$201 - 15 = 186$
$405 + 6 = 411$	$860 * 3 = 2580$	$186 + 14 = 200$
$411 * 2 = 822$	$2580 - 10 = 2570$	$200 - 18 = 182$
$822 - 9 = 813$	$2570 : 10 = 257$	
	$4 + 9 = 13$	

## Kopfrechnen (61)

$2 + 11 = 13$	$11 + 13 = 24$	$22 : 2 = 11$
$13 - 12 = 1$	$24 + 10 = 34$	$11 + 8 = 19$
$1 * 3 = 3$	$34 - 9 = 25$	$19 + 9 = 28$
$3 : 3 = 1$	$25 * 2 = 50$	$28 : 7 = 4$
$1 * 2 = 2$	$50 + 16 = 66$	$4 * 2 = 8$
$2 : 2 = 1$	$66 * 1 = 66$	$8 + 1 = 9$
$1 * 1 = 1$	$66 + 15 = 81$	$9 + 1 = 10$
$1 + 8 = 9$	$81 - 15 = 66$	$10 - 5 = 5$
$9 + 7 = 16$	$66 : 11 = 6$	$5 * 2 = 10$
$16 * 1 = 16$	$6 : 2 = 3$	$10 + 10 = 20$
$16 + 20 = 36$	$3 + 20 = 23$	$20 : 10 = 2$
$36 - 10 = 26$	$23 * 3 = 69$	$2 : 2 = 1$
$26 + 17 = 43$	$69 * 3 = 207$	$1 * 2 = 2$
$43 * 3 = 129$	$207 + 15 = 222$	$2 + 16 = 18$
$129 + 9 = 138$	$222 : 2 = 111$	$18 - 5 = 13$
$138 - 3 = 135$	$111 : 3 = 37$	$13 - 1 = 12$
$135 - 18 = 117$	$37 * 1 = 37$	$12 - 2 = 10$
$117 : 9 = 13$	$37 - 10 = 27$	$10 : 10 = 1$
$13 : 13 = 1$	$27 - 10 = 17$	$1 + 14 = 15$
$1 + 12 = 13$	$17 - 14 = 3$	$15 - 12 = 3$
$13 - 7 = 6$	$3 + 10 = 13$	$3 + 9 = 12$
$6 - 4 = 2$	$13 * 1 = 13$	$12 * 3 = 36$
$2 - 1 = 1$	$13 : 13 = 1$	$36 : 9 = 4$
$1 - 1 = 0$	$1 * 3 = 3$	$4 - 3 = 1$
$0 + 17 = 17$	$3 + 19 = 22$	$1 * 2 = 2$
$17 - 9 = 8$	$22 : 2 = 11$	$2 : 2 = 1$
$8 + 1 = 9$	$11 + 8 = 19$	$1 * 3 = 3$
$9 : 3 = 3$	$19 * 2 = 38$	$3 : 3 = 1$
$3 * 2 = 6$	$38 : 2 = 19$	$1 + 2 = 3$
$6 + 1 = 7$	$19 * 2 = 38$	$3 * 2 = 6$
$7 - 5 = 2$	$38 - 14 = 24$	$6 - 2 = 4$
$2 * 3 = 6$	$24 + 15 = 39$	$4 + 18 = 22$
$6 : 6 = 1$	$39 - 7 = 32$	$22 * 3 = 66$
$1 * 3 = 3$	$32 - 15 = 17$	$66 : 11 = 6$
$3 + 1 = 4$	$17 - 1 = 16$	$6 : 3 = 2$
$4 : 2 = 2$	$16 : 8 = 2$	$2 + 5 = 7$
$2 * 2 = 4$	$2 : 2 = 1$	$7 * 2 = 14$
$4 + 3 = 7$	$1 * 2 = 2$	
	$9 + 13 = 22$	

## Kopfrechnen (62)

$6 + 1 = 7$	$10 + 16 = 26$	$11 + 13 = 24$
$7 + 17 = 24$	$26 - 9 = 17$	$24 : 6 = 4$
$24 - 3 = 21$	$17 - 13 = 4$	$4 + 7 = 11$
$21 : 7 = 3$	$4 : 2 = 2$	$11 * 2 = 22$
$3 + 9 = 12$	$2 + 11 = 13$	$22 - 5 = 17$
$12 + 15 = 27$	$13 : 13 = 1$	$17 - 3 = 14$
$27 : 9 = 3$	$1 + 18 = 19$	$14 * 2 = 28$
$3 + 16 = 19$	$19 - 19 = 0$	$28 - 19 = 9$
$19 + 5 = 24$	$0 + 9 = 9$	$9 : 3 = 3$
$24 + 11 = 35$	$9 + 13 = 22$	$3 + 4 = 7$
$35 : 7 = 5$	$22 - 18 = 4$	$7 : 7 = 1$
$5 * 2 = 10$	$4 : 2 = 2$	$1 + 9 = 10$
$10 : 10 = 1$	$2 * 2 = 4$	$10 + 1 = 11$
$1 + 16 = 17$	$4 + 18 = 22$	$11 + 17 = 28$
$17 + 5 = 22$	$22 - 13 = 9$	$28 - 2 = 26$
$22 : 2 = 11$	$9 - 1 = 8$	$26 * 1 = 26$
$11 - 1 = 10$	$8 * 1 = 8$	$26 + 19 = 45$
$10 + 3 = 13$	$8 : 4 = 2$	$45 : 5 = 9$
$13 * 2 = 26$	$2 * 1 = 2$	$9 * 3 = 27$
$26 - 14 = 12$	$2 + 16 = 18$	$27 - 18 = 9$
$12 + 2 = 14$	$18 : 2 = 9$	$9 : 3 = 3$
$14 : 2 = 7$	$9 - 4 = 5$	$3 + 20 = 23$
$7 : 7 = 1$	$5 + 18 = 23$	$23 * 1 = 23$
$1 + 17 = 18$	$23 + 7 = 30$	$23 * 3 = 69$
$18 - 10 = 8$	$30 + 1 = 31$	$69 : 3 = 23$
$8 + 3 = 11$	$31 + 1 = 32$	$23 - 12 = 11$
$11 : 11 = 1$	$32 + 6 = 38$	$11 - 8 = 3$
$1 * 3 = 3$	$38 + 19 = 57$	$3 + 19 = 22$
$3 + 20 = 23$	$57 * 3 = 171$	$22 * 3 = 66$
$23 + 1 = 24$	$171 - 13 = 158$	$66 * 3 = 198$
$24 : 12 = 2$	$158 * 1 = 158$	$198 : 6 = 33$
$2 * 2 = 4$	$158 - 6 = 152$	$33 + 19 = 52$
$4 * 2 = 8$	$152 - 18 = 134$	$52 : 13 = 4$
$8 : 8 = 1$	$134 + 13 = 147$	$4 + 17 = 21$
$1 + 18 = 19$	$147 + 1 = 148$	$21 + 10 = 31$
$19 * 1 = 19$	$148 - 6 = 142$	$31 * 1 = 31$
$19 - 3 = 16$	$142 * 2 = 284$	$31 - 3 = 28$
$16 : 8 = 2$	$284 + 9 = 293$	
	$7 + 4 = 11$	

## Kopfrechnen (63)

$9 + 12 = 21$	$11 + 6 = 17$	$23 + 11 = 34$
$21 * 3 = 63$	$17 + 11 = 28$	$34 : 2 = 17$
$63 - 13 = 50$	$28 - 7 = 21$	$17 - 15 = 2$
$50 : 5 = 10$	$21 - 12 = 9$	$2 * 1 = 2$
$10 : 10 = 1$	$9 + 6 = 15$	$2 + 16 = 18$
$1 + 13 = 14$	$15 * 1 = 15$	$18 + 1 = 19$
$14 : 7 = 2$	$15 * 3 = 45$	$19 - 4 = 15$
$2 + 9 = 11$	$45 + 15 = 60$	$15 - 7 = 8$
$11 * 1 = 11$	$60 + 8 = 68$	$8 + 15 = 23$
$11 - 3 = 8$	$68 - 17 = 51$	$23 + 18 = 41$
$8 * 3 = 24$	$51 - 4 = 47$	$41 + 9 = 50$
$24 * 1 = 24$	$47 * 1 = 47$	$50 + 17 = 67$
$24 : 12 = 2$	$47 + 4 = 51$	$67 + 2 = 69$
$2 * 1 = 2$	$51 + 3 = 54$	$69 * 2 = 138$
$2 + 6 = 8$	$54 : 2 = 27$	$138 : 2 = 69$
$8 * 3 = 24$	$27 : 3 = 9$	$69 + 10 = 79$
$24 - 17 = 7$	$9 + 20 = 29$	$79 - 6 = 73$
$7 : 7 = 1$	$29 + 8 = 37$	$73 - 11 = 62$
$1 * 1 = 1$	$37 - 1 = 36$	$62 * 2 = 124$
$1 + 20 = 21$	$36 - 7 = 29$	$124 : 2 = 62$
$21 - 4 = 17$	$29 + 15 = 44$	$62 : 2 = 31$
$17 + 17 = 34$	$44 + 11 = 55$	$31 - 18 = 13$
$34 - 10 = 24$	$55 + 8 = 63$	$13 + 19 = 32$
$24 + 16 = 40$	$63 : 7 = 9$	$32 : 4 = 8$
$40 : 2 = 20$	$9 + 4 = 13$	$8 * 2 = 16$
$20 * 2 = 40$	$13 : 13 = 1$	$16 + 15 = 31$
$40 + 9 = 49$	$1 + 20 = 21$	$31 - 4 = 27$
$49 : 7 = 7$	$21 + 3 = 24$	$27 : 9 = 3$
$7 * 3 = 21$	$24 + 5 = 29$	$3 * 3 = 9$
$21 * 2 = 42$	$29 + 11 = 40$	$9 + 15 = 24$
$42 * 3 = 126$	$40 - 9 = 31$	$24 - 16 = 8$
$126 * 2 = 252$	$31 * 1 = 31$	$8 : 8 = 1$
$252 + 14 = 266$	$31 + 2 = 33$	$1 * 3 = 3$
$266 - 12 = 254$	$33 + 10 = 43$	$3 * 3 = 9$
$254 : 2 = 127$	$43 - 7 = 36$	$9 + 13 = 22$
$127 * 1 = 127$	$36 * 2 = 72$	$22 + 1 = 23$
$127 + 15 = 142$	$72 - 10 = 62$	$23 - 10 = 13$
$142 - 17 = 125$	$62 - 4 = 58$	
	$12 + 11 = 23$	

## Kopfrechnen (64)

$8 + 14 = 22$

$22 - 13 = 9$

$9 : 3 = 3$

$3 * 3 = 9$

$9 : 3 = 3$

$3 : 3 = 1$

$1 + 12 = 13$

$13 + 16 = 29$

$29 + 6 = 35$

$35 - 6 = 29$

$29 - 19 = 10$

$10 : 5 = 2$

$2 + 7 = 9$

$9 - 5 = 4$

$4 + 14 = 18$

$18 - 10 = 8$

$8 : 2 = 4$

$4 - 3 = 1$

$1 * 1 = 1$

$1 * 3 = 3$

$3 : 3 = 1$

$1 * 1 = 1$

$1 - 1 = 0$

$0 + 2 = 2$

$2 - 2 = 0$

$0 + 7 = 7$

$7 : 7 = 1$

$1 + 13 = 14$

$14 * 3 = 42$

$42 * 3 = 126$

$126 * 1 = 126$

$126 : 6 = 21$

$21 : 7 = 3$

$3 * 1 = 3$

$3 + 1 = 4$

$4 + 11 = 15$

$15 - 1 = 14$

$14 + 16 = 30$

$2 + 16 = 18$

$18 : 9 = 2$

$2 * 2 = 4$

$4 - 3 = 1$

$1 * 3 = 3$

$3 + 6 = 9$

$9 * 3 = 27$

$27 : 3 = 9$

$9 + 17 = 26$

$26 - 9 = 17$

$17 * 3 = 51$

$51 * 2 = 102$

$102 - 1 = 101$

$101 - 18 = 83$

$83 + 7 = 90$

$90 + 8 = 98$

$98 * 1 = 98$

$98 - 19 = 79$

$79 * 2 = 158$

$158 - 17 = 141$

$141 - 9 = 132$

$132 : 12 = 11$

$11 + 7 = 18$

$18 : 9 = 2$

$2 + 3 = 5$

$5 + 13 = 18$

$18 - 4 = 14$

$14 + 3 = 17$

$17 + 4 = 21$

$21 - 16 = 5$

$5 + 4 = 9$

$9 - 2 = 7$

$7 - 5 = 2$

$2 + 5 = 7$

$7 * 1 = 7$

$7 : 7 = 1$

$1 * 3 = 3$

$3 - 3 = 0$

$6 + 3 = 9$

$9 + 12 = 21$

$21 : 7 = 3$

$3 : 3 = 1$

$1 * 2 = 2$

$2 * 1 = 2$

$2 : 2 = 1$

$1 * 3 = 3$

$3 * 2 = 6$

$6 + 12 = 18$

$18 - 1 = 17$

$17 * 2 = 34$

$34 : 2 = 17$

$17 * 3 = 51$

$51 - 2 = 49$

$49 * 1 = 49$

$49 - 7 = 42$

$42 - 11 = 31$

$31 * 1 = 31$

$31 + 2 = 33$

$33 : 11 = 3$

$3 + 8 = 11$

$11 : 11 = 1$

$1 * 2 = 2$

$2 : 2 = 1$

$1 + 16 = 17$

$17 + 2 = 19$

$19 * 2 = 38$

$38 - 12 = 26$

$26 - 12 = 14$

$14 - 11 = 3$

$3 : 3 = 1$

$1 * 1 = 1$

$1 + 2 = 3$

$3 : 3 = 1$

$1 + 13 = 14$

$14 * 1 = 14$

$14 * 1 = 14$



## Kopfrechnen (65)

$10 + 16 = 26$	$10 + 13 = 23$	$10 - 10 = 0$
$26 - 2 = 24$	$23 + 9 = 32$	$0 + 14 = 14$
$24 : 2 = 12$	$32 * 3 = 96$	$14 : 2 = 7$
$12 - 5 = 7$	$96 + 12 = 108$	$7 * 1 = 7$
$7 + 1 = 8$	$108 * 3 = 324$	$7 + 19 = 26$
$8 * 3 = 24$	$324 : 4 = 81$	$26 - 5 = 21$
$24 * 3 = 72$	$81 + 16 = 97$	$21 : 3 = 7$
$72 - 17 = 55$	$97 - 11 = 86$	$7 * 1 = 7$
$55 : 11 = 5$	$86 - 18 = 68$	$7 * 1 = 7$
$5 : 5 = 1$	$68 - 14 = 54$	$7 * 1 = 7$
$1 + 8 = 9$	$54 - 16 = 38$	$7 + 18 = 25$
$9 : 3 = 3$	$38 - 8 = 30$	$25 + 17 = 42$
$3 + 11 = 14$	$30 : 6 = 5$	$42 + 15 = 57$
$14 : 7 = 2$	$5 : 5 = 1$	$57 - 16 = 41$
$2 + 6 = 8$	$1 + 9 = 10$	$41 * 2 = 82$
$8 + 13 = 21$	$10 + 2 = 12$	$82 - 5 = 77$
$21 - 11 = 10$	$12 + 11 = 23$	$77 - 4 = 73$
$10 + 16 = 26$	$23 + 5 = 28$	$73 * 1 = 73$
$26 - 7 = 19$	$28 : 4 = 7$	$73 + 9 = 82$
$19 * 2 = 38$	$7 + 20 = 27$	$82 - 10 = 72$
$38 * 2 = 76$	$27 - 18 = 9$	$72 + 19 = 91$
$76 * 1 = 76$	$9 * 3 = 27$	$91 * 3 = 273$
$76 + 20 = 96$	$27 + 5 = 32$	$273 - 15 = 258$
$96 - 20 = 76$	$32 : 8 = 4$	$258 : 6 = 43$
$76 * 1 = 76$	$4 * 3 = 12$	$43 * 1 = 43$
$76 : 2 = 38$	$12 : 4 = 3$	$43 + 10 = 53$
$38 + 3 = 41$	$3 * 1 = 3$	$53 - 16 = 37$
$41 * 3 = 123$	$3 * 1 = 3$	$37 - 9 = 28$
$123 * 3 = 369$	$3 * 3 = 9$	$28 + 1 = 29$
$369 : 9 = 41$	$9 + 4 = 13$	$29 + 19 = 48$
$41 * 2 = 82$	$13 + 14 = 27$	$48 : 4 = 12$
$82 * 2 = 164$	$27 + 13 = 40$	$12 * 1 = 12$
$164 - 3 = 161$	$40 : 2 = 20$	$12 + 3 = 15$
$161 * 1 = 161$	$20 + 13 = 33$	$15 + 2 = 17$
$161 - 10 = 151$	$33 - 12 = 21$	$17 - 5 = 12$
$151 * 1 = 151$	$21 - 5 = 16$	$12 : 2 = 6$
$151 * 1 = 151$	$16 : 4 = 4$	$6 + 3 = 9$
$151 + 3 = 154$	$4 - 2 = 2$	
	$1 + 9 = 10$	

## Kopfrechnen (66)

$3 + 11 = 14$

$14 : 7 = 2$

$2 * 3 = 6$

$6 * 1 = 6$

$6 * 3 = 18$

$18 - 15 = 3$

$3 * 2 = 6$

$6 - 2 = 4$

$4 * 2 = 8$

$8 + 10 = 18$

$18 + 2 = 20$

$20 : 5 = 4$

$4 + 15 = 19$

$19 * 1 = 19$

$19 - 4 = 15$

$15 * 2 = 30$

$30 - 10 = 20$

$20 * 3 = 60$

$60 - 11 = 49$

$49 * 1 = 49$

$49 + 6 = 55$

$55 + 6 = 61$

$61 * 1 = 61$

$61 * 3 = 183$

$183 + 13 = 196$

$196 : 7 = 28$

$28 - 7 = 21$

$21 : 3 = 7$

$7 * 3 = 21$

$21 : 7 = 3$

$3 + 16 = 19$

$19 + 16 = 35$

$35 - 14 = 21$

$21 - 13 = 8$

$8 : 2 = 4$

$4 * 2 = 8$

$8 * 1 = 8$

$8 * 3 = 24$

$12 + 20 = 32$

$32 * 1 = 32$

$32 : 8 = 4$

$4 * 1 = 4$

$4 + 8 = 12$

$12 * 3 = 36$

$36 * 2 = 72$

$72 - 4 = 68$

$68 - 3 = 65$

$65 + 16 = 81$

$81 : 9 = 9$

$9 + 6 = 15$

$15 - 4 = 11$

$11 * 3 = 33$

$33 : 11 = 3$

$3 + 8 = 11$

$11 + 15 = 26$

$26 - 8 = 18$

$18 + 7 = 25$

$25 + 4 = 29$

$29 * 3 = 87$

$87 - 8 = 79$

$79 - 14 = 65$

$65 * 1 = 65$

$65 * 2 = 130$

$130 - 6 = 124$

$124 + 7 = 131$

$131 - 2 = 129$

$129 * 1 = 129$

$129 - 16 = 113$

$113 - 9 = 104$

$104 - 8 = 96$

$96 + 20 = 116$

$116 * 1 = 116$

$116 : 2 = 58$

$58 * 3 = 174$

$174 : 6 = 29$

$29 + 20 = 49$

$2 + 8 = 10$

$10 : 10 = 1$

$1 + 5 = 6$

$6 : 3 = 2$

$2 * 3 = 6$

$6 : 6 = 1$

$1 * 2 = 2$

$2 : 2 = 1$

$1 + 11 = 12$

$12 : 3 = 4$

$4 : 4 = 1$

$1 * 2 = 2$

$2 * 3 = 6$

$6 : 3 = 2$

$2 + 11 = 13$

$13 - 3 = 10$

$10 : 10 = 1$

$1 - 1 = 0$

$0 + 11 = 11$

$11 + 5 = 16$

$16 - 1 = 15$

$15 : 5 = 3$

$3 + 15 = 18$

$18 * 3 = 54$

$54 - 19 = 35$

$35 - 20 = 15$

$15 + 7 = 22$

$22 * 3 = 66$

$66 + 1 = 67$

$67 * 3 = 201$

$201 - 13 = 188$

$188 : 4 = 47$

$47 * 1 = 47$

$47 * 2 = 94$

$94 * 2 = 188$

$188 + 7 = 195$

$195 * 1 = 195$

$195 - 12 = 183$

## Kopfrechnen (67)

$11 + 19 = 30$

$30 - 15 = 15$

$15 + 11 = 26$

$26 + 5 = 31$

$31 - 2 = 29$

$29 - 8 = 21$

$21 - 7 = 14$

$14 - 6 = 8$

$8 : 8 = 1$

$1 + 2 = 3$

$3 + 17 = 20$

$20 : 2 = 10$

$10 : 2 = 5$

$5 + 1 = 6$

$6 * 2 = 12$

$12 + 7 = 19$

$19 + 4 = 23$

$23 - 19 = 4$

$4 + 15 = 19$

$19 * 1 = 19$

$19 * 1 = 19$

$19 + 11 = 30$

$30 * 2 = 60$

$60 : 2 = 30$

$30 : 6 = 5$

$5 + 16 = 21$

$21 + 17 = 38$

$38 - 7 = 31$

$31 * 1 = 31$

$31 + 14 = 45$

$45 - 11 = 34$

$34 - 4 = 30$

$30 * 3 = 90$

$90 * 3 = 270$

$270 * 2 = 540$

$540 - 9 = 531$

$531 + 3 = 534$

$534 + 3 = 537$

$8 + 9 = 17$

$17 - 15 = 2$

$2 * 1 = 2$

$2 + 5 = 7$

$7 * 1 = 7$

$7 : 7 = 1$

$1 * 2 = 2$

$2 - 1 = 1$

$1 * 3 = 3$

$3 + 3 = 6$

$6 * 1 = 6$

$6 * 1 = 6$

$6 : 6 = 1$

$1 * 2 = 2$

$2 : 2 = 1$

$1 * 1 = 1$

$1 * 2 = 2$

$2 * 2 = 4$

$4 + 8 = 12$

$12 + 11 = 23$

$23 + 9 = 32$

$32 : 4 = 8$

$8 + 12 = 20$

$20 : 4 = 5$

$5 * 3 = 15$

$15 + 10 = 25$

$25 - 8 = 17$

$17 + 15 = 32$

$32 * 1 = 32$

$32 : 8 = 4$

$4 : 2 = 2$

$2 + 17 = 19$

$19 * 1 = 19$

$19 - 16 = 3$

$3 * 2 = 6$

$6 + 3 = 9$

$9 : 9 = 1$

$1 + 20 = 21$

$10 + 4 = 14$

$14 + 16 = 30$

$30 - 4 = 26$

$26 + 17 = 43$

$43 * 1 = 43$

$43 * 1 = 43$

$43 * 1 = 43$

$43 * 1 = 43$

$43 - 9 = 34$

$34 - 9 = 25$

$25 * 2 = 50$

$50 + 20 = 70$

$70 + 4 = 74$

$74 - 5 = 69$

$69 * 1 = 69$

$69 - 17 = 52$

$52 : 13 = 4$

$4 : 2 = 2$

$2 : 2 = 1$

$1 + 15 = 16$

$16 * 2 = 32$

$32 * 2 = 64$

$64 * 2 = 128$

$128 + 5 = 133$

$133 + 9 = 142$

$142 - 8 = 134$

$134 - 3 = 131$

$131 - 19 = 112$

$112 + 8 = 120$

$120 - 19 = 101$

$101 - 3 = 98$

$98 : 2 = 49$

$49 + 4 = 53$

$53 - 5 = 48$

$48 - 17 = 31$

$31 * 1 = 31$

$31 * 2 = 62$

$62 * 1 = 62$

## Kopfrechnen (68)

$2 + 10 = 12$

$12 + 9 = 21$

$21 + 10 = 31$

$31 - 2 = 29$

$29 - 7 = 22$

$22 + 15 = 37$

$37 - 2 = 35$

$35 + 2 = 37$

$37 - 13 = 24$

$24 - 9 = 15$

$15 + 19 = 34$

$34 + 12 = 46$

$46 - 19 = 27$

$27 : 3 = 9$

$9 : 9 = 1$

$1 * 3 = 3$

$3 - 3 = 0$

$0 + 6 = 6$

$6 * 2 = 12$

$12 + 13 = 25$

$25 + 5 = 30$

$30 * 2 = 60$

$60 - 19 = 41$

$41 - 18 = 23$

$23 - 2 = 21$

$21 - 12 = 9$

$9 : 3 = 3$

$3 * 2 = 6$

$6 + 4 = 10$

$10 + 18 = 28$

$28 : 2 = 14$

$14 + 10 = 24$

$24 : 3 = 8$

$8 * 1 = 8$

$8 : 2 = 4$

$4 * 2 = 8$

$8 * 3 = 24$

$24 * 2 = 48$

$6 + 16 = 22$

$22 + 9 = 31$

$31 + 16 = 47$

$47 - 2 = 45$

$45 : 3 = 15$

$15 + 19 = 34$

$34 * 1 = 34$

$34 + 5 = 39$

$39 - 1 = 38$

$38 + 12 = 50$

$50 - 20 = 30$

$30 + 4 = 34$

$34 - 17 = 17$

$17 * 2 = 34$

$34 * 3 = 102$

$102 + 12 = 114$

$114 * 3 = 342$

$342 * 3 = 1026$

$1026 - 6 = 1020$

$1020 + 15 = 1035$

$1035 : 3 = 345$

$345 * 3 = 1035$

$1035 * 1 = 1035$

$1035 : 5 = 207$

$207 - 2 = 205$

$205 + 15 = 220$

$220 : 5 = 44$

$44 - 5 = 39$

$39 * 3 = 117$

$117 * 1 = 117$

$117 - 15 = 102$

$102 + 19 = 121$

$121 * 3 = 363$

$363 + 17 = 380$

$380 - 19 = 361$

$361 - 7 = 354$

$354 * 1 = 354$

$354 : 2 = 177$

$4 + 16 = 20$

$20 * 3 = 60$

$60 - 14 = 46$

$46 - 13 = 33$

$33 * 3 = 99$

$99 * 1 = 99$

$99 * 1 = 99$

$99 * 1 = 99$

$99 * 2 = 198$

$198 + 10 = 208$

$208 + 18 = 226$

$226 - 12 = 214$

$214 * 1 = 214$

$214 + 5 = 219$

$219 * 2 = 438$

$438 - 5 = 433$

$433 + 17 = 450$

$450 * 3 = 1350$

$1350 - 3 = 1347$

$1347 * 2 = 2694$

$2694 * 3 = 8082$

$8082 : 6 = 1347$

$1347 + 10 = 1357$

$1357 - 1 = 1356$

$1356 - 16 = 1340$

$1340 + 16 = 1356$

$1356 + 12 = 1368$

$1368 - 12 = 1356$

$1356 - 2 = 1354$

$1354 - 5 = 1349$

$1349 + 4 = 1353$

$1353 * 1 = 1353$

$1353 - 16 = 1337$

$1337 - 8 = 1329$

$1329 * 2 = 2658$

$2658 * 2 = 5316$

$5316 - 19 = 5297$

$5297 * 3 = 15891$

## Kopfrechnen (69)

$8 + 9 = 17$   
 $17 * 1 = 17$   
 $17 + 8 = 25$   
 $25 - 4 = 21$   
 $21 - 6 = 15$   
 $15 + 3 = 18$   
 $18 - 1 = 17$   
 $17 * 1 = 17$   
 $17 + 6 = 23$   
 $23 + 8 = 31$   
 $31 - 7 = 24$   
 $24 - 16 = 8$   
 $8 * 1 = 8$   
 $8 + 20 = 28$   
 $28 : 4 = 7$   
 $7 : 7 = 1$   
 $1 * 1 = 1$   
 $1 + 9 = 10$   
 $10 + 1 = 11$   
 $11 + 16 = 27$   
 $27 : 3 = 9$   
 $9 - 6 = 3$   
 $3 + 15 = 18$   
 $18 : 9 = 2$   
 $2 + 18 = 20$   
 $20 : 4 = 5$   
 $5 : 5 = 1$   
 $1 * 1 = 1$   
 $1 + 5 = 6$   
 $6 + 19 = 25$   
 $25 - 4 = 21$   
 $21 + 17 = 38$   
 $38 - 7 = 31$   
 $31 * 1 = 31$   
 $31 + 1 = 32$   
 $32 + 12 = 44$   
 $44 + 15 = 59$   
 $59 - 11 = 48$

$12 + 4 = 16$   
 $16 - 4 = 12$   
 $12 + 9 = 21$   
 $21 : 3 = 7$   
 $7 + 3 = 10$   
 $10 + 4 = 14$   
 $14 + 14 = 28$   
 $28 : 4 = 7$   
 $7 * 3 = 21$   
 $21 * 1 = 21$   
 $21 - 19 = 2$   
 $2 + 6 = 8$   
 $8 - 8 = 0$   
 $0 + 20 = 20$   
 $20 - 3 = 17$   
 $17 * 2 = 34$   
 $34 : 2 = 17$   
 $17 + 1 = 18$   
 $18 : 9 = 2$   
 $2 + 10 = 12$   
 $12 : 2 = 6$   
 $6 * 1 = 6$   
 $6 : 3 = 2$   
 $2 * 3 = 6$   
 $6 : 3 = 2$   
 $2 : 2 = 1$   
 $1 * 2 = 2$   
 $2 * 2 = 4$   
 $4 : 2 = 2$   
 $2 : 2 = 1$   
 $1 + 20 = 21$   
 $21 + 11 = 32$   
 $32 : 2 = 16$   
 $16 - 10 = 6$   
 $6 * 2 = 12$   
 $12 * 2 = 24$   
 $24 - 20 = 4$   
 $4 * 1 = 4$   
 $1 + 4 = 5$

$5 - 3 = 2$   
 $2 + 19 = 21$   
 $21 * 3 = 63$   
 $63 : 7 = 9$   
 $9 + 3 = 12$   
 $12 + 7 = 19$   
 $19 - 7 = 12$   
 $12 * 1 = 12$   
 $12 + 2 = 14$   
 $14 * 2 = 28$   
 $28 : 4 = 7$   
 $7 * 1 = 7$   
 $7 : 7 = 1$   
 $1 * 3 = 3$   
 $3 * 1 = 3$   
 $3 : 3 = 1$   
 $1 * 3 = 3$   
 $3 * 3 = 9$   
 $9 * 1 = 9$   
 $9 + 10 = 19$   
 $19 * 2 = 38$   
 $38 * 3 = 114$   
 $114 : 2 = 57$   
 $57 - 5 = 52$   
 $52 * 2 = 104$   
 $104 * 1 = 104$   
 $104 * 2 = 208$   
 $208 - 5 = 203$   
 $203 + 18 = 221$   
 $221 : 13 = 17$   
 $17 * 1 = 17$   
 $17 * 1 = 17$   
 $17 - 5 = 12$   
 $12 - 10 = 2$   
 $2 - 1 = 1$   
 $1 * 2 = 2$   
 $2 : 2 = 1$

## Kopfrechnen (70)

$1 + 8 = 9$

$9 * 1 = 9$

$9 * 2 = 18$

$18 + 12 = 30$

$30 + 13 = 43$

$43 - 11 = 32$

$32 + 6 = 38$

$38 * 1 = 38$

$38 * 3 = 114$

$114 - 9 = 105$

$105 - 19 = 86$

$86 + 18 = 104$

$104 : 4 = 26$

$26 : 2 = 13$

$13 + 11 = 24$

$24 + 18 = 42$

$42 : 2 = 21$

$21 + 3 = 24$

$24 - 20 = 4$

$4 + 15 = 19$

$19 * 1 = 19$

$19 + 16 = 35$

$35 * 1 = 35$

$35 : 7 = 5$

$5 : 5 = 1$

$1 * 2 = 2$

$2 * 2 = 4$

$4 * 2 = 8$

$8 : 8 = 1$

$1 * 1 = 1$

$1 + 14 = 15$

$15 : 3 = 5$

$5 * 1 = 5$

$5 : 5 = 1$

$1 * 2 = 2$

$2 : 2 = 1$

$1 + 12 = 13$

$13 + 15 = 28$

$4 + 19 = 23$

$23 + 18 = 41$

$41 - 7 = 34$

$34 : 2 = 17$

$17 + 15 = 32$

$32 : 8 = 4$

$4 : 4 = 1$

$1 * 1 = 1$

$1 + 2 = 3$

$3 + 10 = 13$

$13 : 13 = 1$

$1 + 13 = 14$

$14 + 3 = 17$

$17 - 15 = 2$

$2 * 1 = 2$

$2 + 14 = 16$

$16 * 2 = 32$

$32 * 1 = 32$

$32 + 5 = 37$

$37 - 17 = 20$

$20 - 20 = 0$

$0 + 12 = 12$

$12 : 6 = 2$

$2 * 3 = 6$

$6 * 1 = 6$

$6 : 2 = 3$

$3 : 3 = 1$

$1 + 4 = 5$

$5 - 1 = 4$

$4 * 3 = 12$

$12 + 18 = 30$

$30 : 3 = 10$

$10 * 1 = 10$

$10 : 5 = 2$

$2 * 2 = 4$

$4 * 2 = 8$

$8 * 1 = 8$

$8 * 1 = 8$

$2 + 5 = 7$

$7 + 17 = 24$

$24 + 16 = 40$

$40 + 18 = 58$

$58 * 2 = 116$

$116 + 8 = 124$

$124 : 2 = 62$

$62 * 3 = 186$

$186 * 2 = 372$

$372 * 3 = 1116$

$1116 : 3 = 372$

$372 * 1 = 372$

$372 - 19 = 353$

$353 + 14 = 367$

$367 + 10 = 377$

$377 * 1 = 377$

$377 * 3 = 1131$

$1131 : 13 = 87$

$87 + 7 = 94$

$94 + 1 = 95$

$95 - 1 = 94$

$94 + 18 = 112$

$112 * 1 = 112$

$112 * 3 = 336$

$336 - 2 = 334$

$334 + 4 = 338$

$338 : 2 = 169$

$169 * 2 = 338$

$338 * 2 = 676$

$676 : 4 = 169$

$169 * 2 = 338$

$338 * 1 = 338$

$338 : 13 = 26$

$26 - 14 = 12$

$12 * 3 = 36$

$36 - 2 = 34$

$34 * 3 = 102$

$102 : 6 = 17$

## Kopfrechnen (71)

$10 + 13 = 23$

$23 - 10 = 13$

$13 : 13 = 1$

$1 + 3 = 4$

$4 : 4 = 1$

$1 + 6 = 7$

$7 : 7 = 1$

$1 + 10 = 11$

$11 * 1 = 11$

$11 + 2 = 13$

$13 * 1 = 13$

$13 - 6 = 7$

$7 - 4 = 3$

$3 : 3 = 1$

$1 + 15 = 16$

$16 + 16 = 32$

$32 : 2 = 16$

$16 * 2 = 32$

$32 : 8 = 4$

$4 - 4 = 0$

$0 + 14 = 14$

$14 * 2 = 28$

$28 : 2 = 14$

$14 * 1 = 14$

$14 - 4 = 10$

$10 - 4 = 6$

$6 + 13 = 19$

$19 + 14 = 33$

$33 + 19 = 52$

$52 : 2 = 26$

$26 + 13 = 39$

$39 - 15 = 24$

$24 + 10 = 34$

$34 + 1 = 35$

$35 + 19 = 54$

$54 : 6 = 9$

$9 - 7 = 2$

$2 * 3 = 6$

$1 + 2 = 3$

$3 + 5 = 8$

$8 : 8 = 1$

$1 + 13 = 14$

$14 : 7 = 2$

$2 + 13 = 15$

$15 : 3 = 5$

$5 + 9 = 14$

$14 - 14 = 0$

$0 + 12 = 12$

$12 : 12 = 1$

$1 * 3 = 3$

$3 * 2 = 6$

$6 + 8 = 14$

$14 - 13 = 1$

$1 + 14 = 15$

$15 : 3 = 5$

$5 * 1 = 5$

$5 * 1 = 5$

$5 + 9 = 14$

$14 * 1 = 14$

$14 * 1 = 14$

$14 : 2 = 7$

$7 - 2 = 5$

$5 * 1 = 5$

$5 + 20 = 25$

$25 + 12 = 37$

$37 + 6 = 43$

$43 - 20 = 23$

$23 - 17 = 6$

$6 : 6 = 1$

$1 + 3 = 4$

$4 * 3 = 12$

$12 : 4 = 3$

$3 : 3 = 1$

$1 * 3 = 3$

$3 - 3 = 0$

$0 + 12 = 12$

$9 + 17 = 26$

$26 - 11 = 15$

$15 * 1 = 15$

$15 : 3 = 5$

$5 + 5 = 10$

$10 - 7 = 3$

$3 * 1 = 3$

$3 * 1 = 3$

$3 + 4 = 7$

$7 * 3 = 21$

$21 * 2 = 42$

$42 - 3 = 39$

$39 + 6 = 45$

$45 * 3 = 135$

$135 * 2 = 270$

$270 : 3 = 90$

$90 - 12 = 78$

$78 + 18 = 96$

$96 + 12 = 108$

$108 + 10 = 118$

$118 * 3 = 354$

$354 : 3 = 118$

$118 + 15 = 133$

$133 - 11 = 122$

$122 + 19 = 141$

$141 * 2 = 282$

$282 + 17 = 299$

$299 - 14 = 285$

$285 * 1 = 285$

$285 : 5 = 57$

$57 - 10 = 47$

$47 * 3 = 141$

$141 * 2 = 282$

$282 + 7 = 289$

$289 - 3 = 286$

$286 + 13 = 299$

$299 * 2 = 598$

$598 * 1 = 598$

## Kopfrechnen (72)

$8 + 4 = 12$   
 $12 * 1 = 12$   
 $12 * 2 = 24$   
 $24 : 4 = 6$   
 $6 * 1 = 6$   
 $6 + 3 = 9$   
 $9 * 2 = 18$   
 $18 - 10 = 8$   
 $8 + 4 = 12$   
 $12 - 9 = 3$   
 $3 * 1 = 3$   
 $3 : 3 = 1$   
 $1 + 19 = 20$   
 $20 * 1 = 20$   
 $20 : 5 = 4$   
 $4 + 14 = 18$   
 $18 * 2 = 36$   
 $36 - 5 = 31$   
 $31 + 14 = 45$   
 $45 * 3 = 135$   
 $135 - 10 = 125$   
 $125 : 5 = 25$   
 $25 * 2 = 50$   
 $50 : 10 = 5$   
 $5 + 14 = 19$   
 $19 + 11 = 30$   
 $30 - 11 = 19$   
 $19 * 2 = 38$   
 $38 * 1 = 38$   
 $38 + 19 = 57$   
 $57 : 3 = 19$   
 $19 + 19 = 38$   
 $38 * 3 = 114$   
 $114 + 12 = 126$   
 $126 * 2 = 252$   
 $252 * 1 = 252$   
 $252 - 9 = 243$   
 $243 * 2 = 486$

$3 + 2 = 5$   
 $5 : 5 = 1$   
 $1 + 1 = 2$   
 $2 + 16 = 18$   
 $18 + 14 = 32$   
 $32 * 3 = 96$   
 $96 + 18 = 114$   
 $114 - 17 = 97$   
 $97 - 2 = 95$   
 $95 : 5 = 19$   
 $19 * 3 = 57$   
 $57 - 6 = 51$   
 $51 + 13 = 64$   
 $64 - 13 = 51$   
 $51 - 10 = 41$   
 $41 - 15 = 26$   
 $26 - 3 = 23$   
 $23 * 2 = 46$   
 $46 * 3 = 138$   
 $138 - 11 = 127$   
 $127 * 2 = 254$   
 $254 - 17 = 237$   
 $237 - 19 = 218$   
 $218 - 8 = 210$   
 $210 + 8 = 218$   
 $218 + 5 = 223$   
 $223 - 15 = 208$   
 $208 - 1 = 207$   
 $207 : 9 = 23$   
 $23 + 18 = 41$   
 $41 * 3 = 123$   
 $123 + 19 = 142$   
 $142 - 5 = 137$   
 $137 * 2 = 274$   
 $274 * 1 = 274$   
 $274 * 3 = 822$   
 $822 - 16 = 806$   
 $806 - 19 = 787$   
 $12 + 1 = 13$

$13 - 4 = 9$   
 $9 : 9 = 1$   
 $1 * 1 = 1$   
 $1 * 3 = 3$   
 $3 * 1 = 3$   
 $3 * 2 = 6$   
 $6 : 3 = 2$   
 $2 : 2 = 1$   
 $1 + 4 = 5$   
 $5 : 5 = 1$   
 $1 + 2 = 3$   
 $3 + 18 = 21$   
 $21 * 2 = 42$   
 $42 - 2 = 40$   
 $40 - 12 = 28$   
 $28 - 1 = 27$   
 $27 + 17 = 44$   
 $44 + 2 = 46$   
 $46 * 2 = 92$   
 $92 : 4 = 23$   
 $23 * 1 = 23$   
 $23 - 17 = 6$   
 $6 - 6 = 0$   
 $0 + 16 = 16$   
 $16 + 2 = 18$   
 $18 + 10 = 28$   
 $28 + 15 = 43$   
 $43 + 7 = 50$   
 $50 - 18 = 32$   
 $32 : 8 = 4$   
 $4 : 4 = 1$   
 $1 + 8 = 9$   
 $9 - 8 = 1$   
 $1 * 3 = 3$   
 $3 * 3 = 9$   
 $9 * 1 = 9$   
 $9 * 2 = 18$



## Kopfrechnen (73)

11 + 4 = 15  
15 \* 2 = 30  
30 + 16 = 46  
46 \* 1 = 46  
46 - 14 = 32  
32 - 12 = 20  
20 \* 2 = 40  
40 - 17 = 23  
23 \* 2 = 46  
46 : 2 = 23  
23 - 13 = 10  
10 : 5 = 2  
2 \* 3 = 6  
6 + 18 = 24  
24 - 5 = 19  
19 + 10 = 29  
29 - 12 = 17  
17 + 18 = 35  
35 + 9 = 44  
44 - 5 = 39  
39 + 9 = 48  
48 + 6 = 54  
54 : 3 = 18  
18 \* 3 = 54  
54 - 1 = 53  
53 + 20 = 73  
73 - 8 = 65  
65 - 3 = 62  
62 : 2 = 31  
31 + 2 = 33  
33 - 12 = 21  
21 + 2 = 23  
23 + 10 = 33  
33 + 20 = 53  
53 \* 2 = 106  
106 : 2 = 53  
53 - 19 = 34  
34 + 4 = 38

12 + 10 = 22  
22 - 11 = 11  
11 - 9 = 2  
2 : 2 = 1  
1 + 8 = 9  
9 : 9 = 1  
1 \* 1 = 1  
1 + 7 = 8  
8 + 1 = 9  
9 \* 2 = 18  
18 : 6 = 3  
3 \* 2 = 6  
6 + 16 = 22  
22 \* 3 = 66  
66 - 1 = 65  
65 \* 3 = 195  
195 : 5 = 39  
39 : 13 = 3  
3 + 10 = 13  
13 + 4 = 17  
17 - 6 = 11  
11 + 12 = 23  
23 + 12 = 35  
35 - 2 = 33  
33 \* 3 = 99  
99 + 13 = 112  
112 \* 2 = 224  
224 : 7 = 32  
32 \* 3 = 96  
96 + 7 = 103  
103 + 13 = 116  
116 \* 1 = 116  
116 + 7 = 123  
123 + 16 = 139  
139 - 1 = 138  
138 \* 1 = 138  
138 + 15 = 153  
153 - 15 = 138  
2 + 11 = 13

13 - 11 = 2  
2 + 12 = 14  
14 + 4 = 18  
18 : 9 = 2  
2 \* 2 = 4  
4 \* 2 = 8  
8 : 2 = 4  
4 \* 1 = 4  
4 + 2 = 6  
6 : 3 = 2  
2 : 2 = 1  
1 \* 2 = 2  
2 \* 3 = 6  
6 \* 1 = 6  
6 : 6 = 1  
1 \* 2 = 2  
2 + 18 = 20  
20 \* 3 = 60  
60 \* 2 = 120  
120 \* 2 = 240  
240 + 15 = 255  
255 + 8 = 263  
263 + 11 = 274  
274 : 2 = 137  
137 \* 2 = 274  
274 \* 3 = 822  
822 : 6 = 137  
137 + 15 = 152  
152 + 20 = 172  
172 \* 2 = 344  
344 \* 3 = 1032  
1032 \* 1 = 1032  
1032 - 16 = 1016  
1016 : 8 = 127  
127 \* 3 = 381  
381 \* 2 = 762  
762 \* 1 = 762

## Kopfrechnen (74)

$2 + 15 = 17$

$17 * 1 = 17$

$17 - 9 = 8$

$8 * 3 = 24$

$24 + 15 = 39$

$39 - 17 = 22$

$22 - 18 = 4$

$4 - 2 = 2$

$2 : 2 = 1$

$1 * 3 = 3$

$3 : 3 = 1$

$1 * 2 = 2$

$2 + 15 = 17$

$17 * 1 = 17$

$17 + 2 = 19$

$19 + 11 = 30$

$30 : 10 = 3$

$3 * 3 = 9$

$9 : 3 = 3$

$3 * 3 = 9$

$9 : 3 = 3$

$3 * 1 = 3$

$3 - 3 = 0$

$0 + 10 = 10$

$10 : 2 = 5$

$5 + 1 = 6$

$6 + 17 = 23$

$23 - 20 = 3$

$3 * 1 = 3$

$3 : 3 = 1$

$1 * 2 = 2$

$2 : 2 = 1$

$1 + 20 = 21$

$21 + 14 = 35$

$35 + 1 = 36$

$36 : 6 = 6$

$6 + 15 = 21$

$21 : 3 = 7$

$5 + 5 = 10$

$10 : 2 = 5$

$5 * 1 = 5$

$5 : 5 = 1$

$1 * 1 = 1$

$1 * 3 = 3$

$3 : 3 = 1$

$1 * 3 = 3$

$3 * 1 = 3$

$3 * 3 = 9$

$9 - 4 = 5$

$5 + 13 = 18$

$18 : 6 = 3$

$3 + 7 = 10$

$10 + 20 = 30$

$30 : 6 = 5$

$5 + 3 = 8$

$8 * 1 = 8$

$8 * 2 = 16$

$16 * 2 = 32$

$32 * 3 = 96$

$96 - 5 = 91$

$91 - 1 = 90$

$90 : 5 = 18$

$18 : 9 = 2$

$2 * 2 = 4$

$4 * 2 = 8$

$8 : 2 = 4$

$4 * 3 = 12$

$12 : 12 = 1$

$1 + 8 = 9$

$9 * 2 = 18$

$18 + 1 = 19$

$19 + 8 = 27$

$27 + 6 = 33$

$33 - 9 = 24$

$24 - 12 = 12$

$12 : 6 = 2$

$8 + 2 = 10$

$10 : 5 = 2$

$2 : 2 = 1$

$1 + 15 = 16$

$16 : 4 = 4$

$4 * 1 = 4$

$4 : 2 = 2$

$2 * 1 = 2$

$2 + 14 = 16$

$16 : 2 = 8$

$8 - 5 = 3$

$3 + 6 = 9$

$9 : 9 = 1$

$1 * 2 = 2$

$2 + 20 = 22$

$22 + 7 = 29$

$29 - 5 = 24$

$24 : 3 = 8$

$8 * 1 = 8$

$8 : 8 = 1$

$1 * 2 = 2$

$2 : 2 = 1$

$1 * 1 = 1$

$1 * 3 = 3$

$3 - 3 = 0$

$0 + 18 = 18$

$18 - 18 = 0$

$0 + 16 = 16$

$16 + 10 = 26$

$26 + 20 = 46$

$46 + 9 = 55$

$55 * 3 = 165$

$165 * 3 = 495$

$495 : 5 = 99$

$99 + 12 = 111$

$111 * 1 = 111$

$111 + 6 = 117$

$117 * 3 = 351$

## Kopfrechnen (75)

$4 + 3 = 7$   
 $7 + 8 = 15$   
 $15 * 1 = 15$   
 $15 : 5 = 3$   
 $3 + 1 = 4$   
 $4 * 1 = 4$   
 $4 + 20 = 24$   
 $24 : 6 = 4$   
 $4 : 2 = 2$   
 $2 * 2 = 4$   
 $4 + 18 = 22$   
 $22 + 2 = 24$   
 $24 * 3 = 72$   
 $72 * 1 = 72$   
 $72 : 9 = 8$   
 $8 : 2 = 4$   
 $4 * 2 = 8$   
 $8 + 10 = 18$   
 $18 * 3 = 54$   
 $54 - 6 = 48$   
 $48 + 5 = 53$   
 $53 + 17 = 70$   
 $70 - 3 = 67$   
 $67 - 1 = 66$   
 $66 - 7 = 59$   
 $59 * 2 = 118$   
 $118 : 2 = 59$   
 $59 * 1 = 59$   
 $59 * 2 = 118$   
 $118 : 2 = 59$   
 $59 - 1 = 58$   
 $58 * 2 = 116$   
 $116 : 2 = 58$   
 $58 * 1 = 58$   
 $58 * 2 = 116$   
 $116 : 2 = 58$   
 $58 + 2 = 60$   
 $60 * 1 = 60$

$2 + 2 = 4$   
 $4 + 8 = 12$   
 $12 - 2 = 10$   
 $10 + 10 = 20$   
 $20 * 2 = 40$   
 $40 + 2 = 42$   
 $42 - 14 = 28$   
 $28 : 4 = 7$   
 $7 : 7 = 1$   
 $1 * 2 = 2$   
 $2 * 2 = 4$   
 $4 + 20 = 24$   
 $24 * 3 = 72$   
 $72 : 6 = 12$   
 $12 + 13 = 25$   
 $25 + 19 = 44$   
 $44 * 1 = 44$   
 $44 * 1 = 44$   
 $44 - 5 = 39$   
 $39 - 11 = 28$   
 $28 + 4 = 32$   
 $32 - 19 = 13$   
 $13 - 4 = 9$   
 $9 * 3 = 27$   
 $27 - 16 = 11$   
 $11 - 10 = 1$   
 $1 * 2 = 2$   
 $2 + 14 = 16$   
 $16 : 4 = 4$   
 $4 + 8 = 12$   
 $12 * 3 = 36$   
 $36 : 12 = 3$   
 $3 + 4 = 7$   
 $7 - 3 = 4$   
 $4 + 14 = 18$   
 $18 * 2 = 36$   
 $36 + 16 = 52$   
 $52 - 6 = 46$   
 $1 + 3 = 4$

$4 : 2 = 2$   
 $2 + 9 = 11$   
 $11 * 3 = 33$   
 $33 - 11 = 22$   
 $22 + 14 = 36$   
 $36 - 19 = 17$   
 $17 + 15 = 32$   
 $32 : 4 = 8$   
 $8 * 3 = 24$   
 $24 - 17 = 7$   
 $7 : 7 = 1$   
 $1 + 15 = 16$   
 $16 * 2 = 32$   
 $32 + 11 = 43$   
 $43 - 1 = 42$   
 $42 : 2 = 21$   
 $21 : 3 = 7$   
 $7 + 15 = 22$   
 $22 - 6 = 16$   
 $16 * 3 = 48$   
 $48 : 8 = 6$   
 $6 * 1 = 6$   
 $6 : 2 = 3$   
 $3 * 2 = 6$   
 $6 : 2 = 3$   
 $3 * 2 = 6$   
 $6 : 3 = 2$   
 $2 * 2 = 4$   
 $4 + 13 = 17$   
 $17 + 12 = 29$   
 $29 - 19 = 10$   
 $10 : 10 = 1$   
 $1 + 1 = 2$   
 $2 * 2 = 4$   
 $4 - 1 = 3$   
 $3 : 3 = 1$   
 $1 + 19 = 20$

## Kopfrechnen (76)

$1 + 2 = 3$	$9 + 16 = 25$	$4 + 1 = 5$
$3 : 3 = 1$	$25 : 5 = 5$	$5 * 1 = 5$
$1 * 1 = 1$	$5 * 1 = 5$	$5 * 3 = 15$
$1 + 19 = 20$	$5 + 4 = 9$	$15 + 15 = 30$
$20 * 1 = 20$	$9 : 9 = 1$	$30 : 5 = 6$
$20 * 2 = 40$	$1 + 6 = 7$	$6 + 9 = 15$
$40 : 4 = 10$	$7 + 15 = 22$	$15 : 5 = 3$
$10 - 2 = 8$	$22 - 5 = 17$	$3 * 2 = 6$
$8 * 1 = 8$	$17 * 3 = 51$	$6 - 5 = 1$
$8 * 1 = 8$	$51 + 20 = 71$	$1 * 2 = 2$
$8 + 17 = 25$	$71 + 5 = 76$	$2 * 2 = 4$
$25 + 12 = 37$	$76 - 3 = 73$	$4 * 1 = 4$
$37 - 7 = 30$	$73 * 2 = 146$	$4 * 3 = 12$
$30 + 11 = 41$	$146 - 7 = 139$	$12 + 18 = 30$
$41 * 1 = 41$	$139 * 1 = 139$	$30 + 4 = 34$
$41 - 4 = 37$	$139 - 15 = 124$	$34 + 8 = 42$
$37 + 14 = 51$	$124 : 4 = 31$	$42 + 11 = 53$
$51 * 3 = 153$	$31 - 20 = 11$	$53 - 20 = 33$
$153 + 4 = 157$	$11 - 3 = 8$	$33 : 11 = 3$
$157 - 20 = 137$	$8 + 14 = 22$	$3 * 2 = 6$
$137 * 3 = 411$	$22 + 9 = 31$	$6 + 12 = 18$
$411 - 2 = 409$	$31 - 10 = 21$	$18 * 1 = 18$
$409 + 9 = 418$	$21 + 12 = 33$	$18 - 1 = 17$
$418 * 3 = 1254$	$33 : 11 = 3$	$17 * 1 = 17$
$1254 : 6 = 209$	$3 * 3 = 9$	$17 - 6 = 11$
$209 + 5 = 214$	$9 + 20 = 29$	$11 : 11 = 1$
$214 * 1 = 214$	$29 - 16 = 13$	$1 * 2 = 2$
$214 : 2 = 107$	$13 * 2 = 26$	$2 : 2 = 1$
$107 - 19 = 88$	$26 - 16 = 10$	$1 + 18 = 19$
$88 * 1 = 88$	$10 + 4 = 14$	$19 - 10 = 9$
$88 : 8 = 11$	$14 : 7 = 2$	$9 * 3 = 27$
$11 : 11 = 1$	$2 * 2 = 4$	$27 - 3 = 24$
$1 + 6 = 7$	$4 + 5 = 9$	$24 * 1 = 24$
$7 + 13 = 20$	$9 * 3 = 27$	$24 - 12 = 12$
$20 * 2 = 40$	$27 * 3 = 81$	$12 + 8 = 20$
$40 - 9 = 31$	$81 - 20 = 61$	$20 - 14 = 6$
$31 - 13 = 18$	$61 - 13 = 48$	$6 : 6 = 1$
$18 : 6 = 3$	$48 * 1 = 48$	
	$1 + 3 = 4$	

## Kopfrechnen (77)

$3 + 19 = 22$	$9 + 14 = 23$	$12 * 3 = 36$
$22 * 3 = 66$	$23 + 10 = 33$	$36 + 13 = 49$
$66 - 2 = 64$	$33 - 16 = 17$	$49 - 19 = 30$
$64 : 8 = 8$	$17 * 2 = 34$	$30 * 2 = 60$
$8 * 3 = 24$	$34 * 1 = 34$	$60 - 11 = 49$
$24 - 11 = 13$	$34 - 3 = 31$	$49 : 7 = 7$
$13 + 15 = 28$	$31 - 17 = 14$	$7 + 2 = 9$
$28 - 17 = 11$	$14 * 2 = 28$	$9 - 3 = 6$
$11 : 11 = 1$	$28 + 10 = 38$	$6 - 6 = 0$
$1 + 16 = 17$	$38 * 2 = 76$	$0 + 10 = 10$
$17 + 4 = 21$	$76 + 18 = 94$	$10 * 2 = 20$
$21 - 3 = 18$	$94 - 2 = 92$	$20 - 1 = 19$
$18 + 7 = 25$	$92 + 3 = 95$	$19 + 11 = 30$
$25 : 5 = 5$	$95 - 10 = 85$	$30 - 16 = 14$
$5 + 19 = 24$	$85 + 14 = 99$	$14 + 14 = 28$
$24 : 4 = 6$	$99 : 11 = 9$	$28 - 7 = 21$
$6 * 2 = 12$	$9 + 19 = 28$	$21 : 7 = 3$
$12 * 2 = 24$	$28 * 2 = 56$	$3 + 5 = 8$
$24 - 18 = 6$	$56 - 11 = 45$	$8 * 1 = 8$
$6 - 2 = 4$	$45 : 3 = 15$	$8 - 5 = 3$
$4 : 2 = 2$	$15 + 11 = 26$	$3 + 4 = 7$
$2 * 1 = 2$	$26 : 2 = 13$	$7 - 1 = 6$
$2 + 5 = 7$	$13 * 3 = 39$	$6 - 6 = 0$
$7 + 2 = 9$	$39 + 7 = 46$	$0 + 18 = 18$
$9 : 3 = 3$	$46 : 2 = 23$	$18 * 2 = 36$
$3 : 3 = 1$	$23 - 19 = 4$	$36 * 2 = 72$
$1 + 18 = 19$	$4 * 3 = 12$	$72 - 14 = 58$
$19 * 3 = 57$	$12 - 1 = 11$	$58 * 2 = 116$
$57 + 10 = 67$	$11 - 5 = 6$	$116 - 12 = 104$
$67 * 2 = 134$	$6 : 2 = 3$	$104 + 1 = 105$
$134 * 2 = 268$	$3 - 3 = 0$	$105 + 15 = 120$
$268 + 6 = 274$	$0 + 6 = 6$	$120 * 1 = 120$
$274 * 1 = 274$	$6 : 2 = 3$	$120 : 5 = 24$
$274 - 18 = 256$	$3 + 6 = 9$	$24 : 8 = 3$
$256 * 2 = 512$	$9 : 9 = 1$	$3 * 3 = 9$
$512 + 13 = 525$	$1 + 14 = 15$	$9 - 1 = 8$
$525 + 19 = 544$	$15 + 15 = 30$	$8 + 7 = 15$
$544 * 1 = 544$	$30 * 1 = 30$	
	$3 + 9 = 12$	

## Kopfrechnen (78)

$11 + 15 = 26$

$26 - 14 = 12$

$12 + 18 = 30$

$30 : 2 = 15$

$15 * 3 = 45$

$45 + 18 = 63$

$63 - 2 = 61$

$61 + 17 = 78$

$78 : 6 = 13$

$13 - 4 = 9$

$9 * 2 = 18$

$18 - 11 = 7$

$7 * 3 = 21$

$21 : 7 = 3$

$3 - 1 = 2$

$2 * 3 = 6$

$6 + 11 = 17$

$17 * 1 = 17$

$17 - 16 = 1$

$1 + 17 = 18$

$18 * 1 = 18$

$18 * 2 = 36$

$36 : 2 = 18$

$18 * 2 = 36$

$36 - 5 = 31$

$31 * 3 = 93$

$93 + 17 = 110$

$110 * 1 = 110$

$110 + 11 = 121$

$121 * 2 = 242$

$242 + 4 = 246$

$246 * 1 = 246$

$246 * 3 = 738$

$738 * 1 = 738$

$738 * 1 = 738$

$738 - 1 = 737$

$737 : 11 = 67$

$67 + 6 = 73$

$1 + 7 = 8$

$8 : 2 = 4$

$4 + 1 = 5$

$5 * 2 = 10$

$10 * 3 = 30$

$30 * 1 = 30$

$30 - 8 = 22$

$22 + 4 = 26$

$26 : 13 = 2$

$2 : 2 = 1$

$1 * 1 = 1$

$1 + 6 = 7$

$7 - 5 = 2$

$2 + 8 = 10$

$10 + 4 = 14$

$14 - 11 = 3$

$3 * 2 = 6$

$6 + 10 = 16$

$16 : 4 = 4$

$4 * 2 = 8$

$8 - 8 = 0$

$0 + 20 = 20$

$20 : 10 = 2$

$2 : 2 = 1$

$1 + 3 = 4$

$4 + 1 = 5$

$5 + 20 = 25$

$25 : 5 = 5$

$5 - 2 = 3$

$3 + 6 = 9$

$9 : 3 = 3$

$3 + 16 = 19$

$19 - 13 = 6$

$6 * 3 = 18$

$18 - 18 = 0$

$0 + 15 = 15$

$15 * 2 = 30$

$30 + 20 = 50$

$5 + 18 = 23$

$23 - 4 = 19$

$19 - 11 = 8$

$8 * 1 = 8$

$8 * 3 = 24$

$24 * 1 = 24$

$24 - 10 = 14$

$14 + 2 = 16$

$16 * 2 = 32$

$32 - 11 = 21$

$21 : 7 = 3$

$3 : 3 = 1$

$1 * 1 = 1$

$1 + 2 = 3$

$3 + 7 = 10$

$10 : 10 = 1$

$1 * 1 = 1$

$1 * 2 = 2$

$2 + 2 = 4$

$4 : 2 = 2$

$2 * 3 = 6$

$6 * 2 = 12$

$12 - 5 = 7$

$7 : 7 = 1$

$1 + 1 = 2$

$2 : 2 = 1$

$1 + 8 = 9$

$9 : 9 = 1$

$1 * 3 = 3$

$3 * 1 = 3$

$3 * 3 = 9$

$9 + 6 = 15$

$15 - 15 = 0$

$0 + 13 = 13$

$13 - 13 = 0$

$0 + 18 = 18$

$18 + 13 = 31$

$31 - 6 = 25$

## Kopfrechnen (79)

$5 + 13 = 18$	$10 + 1 = 11$	$12 * 1 = 12$
$18 * 3 = 54$	$11 - 1 = 10$	$12 + 6 = 18$
$54 - 8 = 46$	$10 : 5 = 2$	$18 + 15 = 33$
$46 : 2 = 23$	$2 * 3 = 6$	$33 * 1 = 33$
$23 - 5 = 18$	$6 * 2 = 12$	$33 * 2 = 66$
$18 + 18 = 36$	$12 * 1 = 12$	$66 + 4 = 70$
$36 - 11 = 25$	$12 * 1 = 12$	$70 * 3 = 210$
$25 : 5 = 5$	$12 - 6 = 6$	$210 - 19 = 191$
$5 * 2 = 10$	$6 : 2 = 3$	$191 + 5 = 196$
$10 * 2 = 20$	$3 + 11 = 14$	$196 : 4 = 49$
$20 - 13 = 7$	$14 * 1 = 14$	$49 - 16 = 33$
$7 + 15 = 22$	$14 - 11 = 3$	$33 * 1 = 33$
$22 * 3 = 66$	$3 + 6 = 9$	$33 * 3 = 99$
$66 * 1 = 66$	$9 + 8 = 17$	$99 * 1 = 99$
$66 : 6 = 11$	$17 + 13 = 30$	$99 + 12 = 111$
$11 : 11 = 1$	$30 - 9 = 21$	$111 : 3 = 37$
$1 + 3 = 4$	$21 : 3 = 7$	$37 - 4 = 33$
$4 * 1 = 4$	$7 - 1 = 6$	$33 : 3 = 11$
$4 * 1 = 4$	$6 + 20 = 26$	$11 + 14 = 25$
$4 * 1 = 4$	$26 * 2 = 52$	$25 : 5 = 5$
$4 + 14 = 18$	$52 : 13 = 4$	$5 + 8 = 13$
$18 - 2 = 16$	$4 - 1 = 3$	$13 - 8 = 5$
$16 + 3 = 19$	$3 * 1 = 3$	$5 : 5 = 1$
$19 * 3 = 57$	$3 + 10 = 13$	$1 + 8 = 9$
$57 - 19 = 38$	$13 : 13 = 1$	$9 * 2 = 18$
$38 * 3 = 114$	$1 + 20 = 21$	$18 - 8 = 10$
$114 * 2 = 228$	$21 * 3 = 63$	$10 * 1 = 10$
$228 + 7 = 235$	$63 - 19 = 44$	$10 : 2 = 5$
$235 + 9 = 244$	$44 * 2 = 88$	$5 * 1 = 5$
$244 + 10 = 254$	$88 - 4 = 84$	$5 * 1 = 5$
$254 + 3 = 257$	$84 * 2 = 168$	$5 + 1 = 6$
$257 * 3 = 771$	$168 * 3 = 504$	$6 * 3 = 18$
$771 + 6 = 777$	$504 - 2 = 502$	$18 + 16 = 34$
$777 * 2 = 1554$	$502 - 6 = 496$	$34 * 1 = 34$
$1554 + 16 = 1570$	$496 : 2 = 248$	$34 * 1 = 34$
$1570 * 3 = 4710$	$248 : 8 = 31$	$34 + 11 = 45$
$4710 * 2 = 9420$	$31 - 6 = 25$	$45 : 5 = 9$
$9420 - 1 = 9419$	$25 - 7 = 18$	
	$3 + 9 = 12$	

## Kopfrechnen (80)

$12 + 17 = 29$	$8 + 20 = 28$	$18 + 12 = 30$
$29 + 11 = 40$	$28 * 2 = 56$	$30 * 3 = 90$
$40 * 3 = 120$	$56 : 7 = 8$	$90 * 3 = 270$
$120 : 5 = 24$	$8 * 2 = 16$	$270 : 9 = 30$
$24 * 3 = 72$	$16 : 4 = 4$	$30 + 4 = 34$
$72 + 3 = 75$	$4 + 5 = 9$	$34 - 18 = 16$
$75 * 1 = 75$	$9 * 3 = 27$	$16 : 2 = 8$
$75 + 12 = 87$	$27 : 3 = 9$	$8 + 9 = 17$
$87 * 3 = 261$	$9 * 1 = 9$	$17 - 16 = 1$
$261 - 8 = 253$	$9 - 6 = 3$	$1 + 13 = 14$
$253 + 19 = 272$	$3 * 1 = 3$	$14 + 12 = 26$
$272 - 6 = 266$	$3 * 1 = 3$	$26 + 8 = 34$
$266 : 2 = 133$	$3 + 14 = 17$	$34 * 1 = 34$
$133 * 3 = 399$	$17 - 7 = 10$	$34 - 18 = 16$
$399 : 3 = 133$	$10 - 10 = 0$	$16 : 8 = 2$
$133 : 7 = 19$	$0 + 13 = 13$	$2 + 6 = 8$
$19 + 3 = 22$	$13 : 13 = 1$	$8 : 8 = 1$
$22 : 2 = 11$	$1 * 1 = 1$	$1 * 2 = 2$
$11 * 2 = 22$	$1 + 14 = 15$	$2 * 3 = 6$
$22 + 5 = 27$	$15 : 5 = 3$	$6 * 3 = 18$
$27 - 1 = 26$	$3 * 3 = 9$	$18 + 19 = 37$
$26 + 8 = 34$	$9 + 6 = 15$	$37 * 3 = 111$
$34 - 18 = 16$	$15 : 3 = 5$	$111 * 1 = 111$
$16 - 12 = 4$	$5 : 5 = 1$	$111 * 2 = 222$
$4 + 19 = 23$	$1 + 15 = 16$	$222 - 2 = 220$
$23 * 3 = 69$	$16 + 18 = 34$	$220 : 10 = 22$
$69 * 2 = 138$	$34 * 1 = 34$	$22 * 3 = 66$
$138 - 10 = 128$	$34 + 6 = 40$	$66 - 16 = 50$
$128 * 2 = 256$	$40 - 17 = 23$	$50 - 13 = 37$
$256 - 9 = 247$	$23 * 3 = 69$	$37 * 1 = 37$
$247 + 18 = 265$	$69 + 2 = 71$	$37 + 16 = 53$
$265 : 5 = 53$	$71 - 7 = 64$	$53 * 1 = 53$
$53 * 1 = 53$	$64 - 2 = 62$	$53 * 3 = 159$
$53 * 2 = 106$	$62 * 1 = 62$	$159 * 3 = 477$
$106 : 2 = 53$	$62 + 5 = 67$	$477 + 1 = 478$
$53 * 2 = 106$	$67 + 11 = 78$	$478 + 10 = 488$
$106 : 2 = 53$	$78 : 13 = 6$	$488 - 5 = 483$
$53 + 15 = 68$	$6 * 1 = 6$	
	$2 + 16 = 18$	



## Kopfrechnen (81)

$11 + 2 = 13$

$13 + 16 = 29$

$29 * 2 = 58$

$58 + 3 = 61$

$61 * 3 = 183$

$183 - 1 = 182$

$182 : 13 = 14$

$14 * 2 = 28$

$28 - 4 = 24$

$24 : 12 = 2$

$2 * 2 = 4$

$4 - 3 = 1$

$1 + 13 = 14$

$14 * 1 = 14$

$14 + 9 = 23$

$23 + 8 = 31$

$31 - 17 = 14$

$14 - 11 = 3$

$3 : 3 = 1$

$1 + 4 = 5$

$5 + 14 = 19$

$19 * 2 = 38$

$38 + 8 = 46$

$46 * 1 = 46$

$46 : 2 = 23$

$23 + 18 = 41$

$41 + 18 = 59$

$59 + 5 = 64$

$64 - 13 = 51$

$51 - 10 = 41$

$41 * 1 = 41$

$41 * 3 = 123$

$123 + 13 = 136$

$136 + 10 = 146$

$146 : 2 = 73$

$73 + 10 = 83$

$83 + 17 = 100$

$100 - 10 = 90$

$4 + 12 = 16$

$16 - 12 = 4$

$4 * 2 = 8$

$8 : 8 = 1$

$1 * 3 = 3$

$3 + 5 = 8$

$8 : 8 = 1$

$1 + 3 = 4$

$4 * 3 = 12$

$12 + 12 = 24$

$24 + 5 = 29$

$29 * 1 = 29$

$29 * 1 = 29$

$29 - 7 = 22$

$22 + 5 = 27$

$27 - 8 = 19$

$19 - 6 = 13$

$13 - 6 = 7$

$7 * 1 = 7$

$7 - 7 = 0$

$0 + 1 = 1$

$1 * 3 = 3$

$3 - 3 = 0$

$0 + 5 = 5$

$5 - 1 = 4$

$4 - 3 = 1$

$1 * 2 = 2$

$2 + 9 = 11$

$11 * 1 = 11$

$11 + 4 = 15$

$15 - 8 = 7$

$7 - 7 = 0$

$0 + 9 = 9$

$9 * 2 = 18$

$18 * 3 = 54$

$54 - 5 = 49$

$49 * 1 = 49$

$49 + 1 = 50$

$3 + 18 = 21$

$21 - 8 = 13$

$13 + 13 = 26$

$26 - 10 = 16$

$16 - 13 = 3$

$3 * 2 = 6$

$6 : 2 = 3$

$3 * 2 = 6$

$6 : 3 = 2$

$2 + 15 = 17$

$17 + 5 = 22$

$22 + 5 = 27$

$27 + 1 = 28$

$28 : 7 = 4$

$4 * 2 = 8$

$8 - 4 = 4$

$4 - 4 = 0$

$0 + 14 = 14$

$14 * 3 = 42$

$42 : 3 = 14$

$14 * 3 = 42$

$42 - 12 = 30$

$30 * 3 = 90$

$90 + 16 = 106$

$106 * 3 = 318$

$318 : 6 = 53$

$53 * 3 = 159$

$159 * 1 = 159$

$159 + 15 = 174$

$174 - 6 = 168$

$168 - 17 = 151$

$151 - 15 = 136$

$136 : 8 = 17$

$17 * 1 = 17$

$17 - 10 = 7$

$7 * 3 = 21$

$21 * 2 = 42$

$42 * 2 = 84$

## Kopfrechnen (82)

$2 + 14 = 16$	$11 + 18 = 29$	$12 + 7 = 19$
$16 : 4 = 4$	$29 + 20 = 49$	$19 - 12 = 7$
$4 + 18 = 22$	$49 * 3 = 147$	$7 * 3 = 21$
$22 - 8 = 14$	$147 + 3 = 150$	$21 - 17 = 4$
$14 + 1 = 15$	$150 * 3 = 450$	$4 * 2 = 8$
$15 * 1 = 15$	$450 - 20 = 430$	$8 + 8 = 16$
$15 * 1 = 15$	$430 * 2 = 860$	$16 + 6 = 22$
$15 * 1 = 15$	$860 - 20 = 840$	$22 : 2 = 11$
$15 * 2 = 30$	$840 + 19 = 859$	$11 * 2 = 22$
$30 + 15 = 45$	$859 + 7 = 866$	$22 : 2 = 11$
$45 * 3 = 135$	$866 * 1 = 866$	$11 - 9 = 2$
$135 * 2 = 270$	$866 - 4 = 862$	$2 + 18 = 20$
$270 + 12 = 282$	$862 : 2 = 431$	$20 * 2 = 40$
$282 : 6 = 47$	$431 + 5 = 436$	$40 : 4 = 10$
$47 + 7 = 54$	$436 : 4 = 109$	$10 : 10 = 1$
$54 * 1 = 54$	$109 + 12 = 121$	$1 + 5 = 6$
$54 * 3 = 162$	$121 - 20 = 101$	$6 + 13 = 19$
$162 + 15 = 177$	$101 - 9 = 92$	$19 * 3 = 57$
$177 * 1 = 177$	$92 - 5 = 87$	$57 * 1 = 57$
$177 - 3 = 174$	$87 : 3 = 29$	$57 - 8 = 49$
$174 - 6 = 168$	$29 + 19 = 48$	$49 - 14 = 35$
$168 - 18 = 150$	$48 * 3 = 144$	$35 * 3 = 105$
$150 * 3 = 450$	$144 * 2 = 288$	$105 : 3 = 35$
$450 + 10 = 460$	$288 - 11 = 277$	$35 - 3 = 32$
$460 * 1 = 460$	$277 - 19 = 258$	$32 : 2 = 16$
$460 : 4 = 115$	$258 * 3 = 774$	$16 + 3 = 19$
$115 - 13 = 102$	$774 + 7 = 781$	$19 + 11 = 30$
$102 + 16 = 118$	$781 * 2 = 1562$	$30 + 2 = 32$
$118 : 2 = 59$	$1562 - 7 = 1555$	$32 - 10 = 22$
$59 - 17 = 42$	$1555 - 18 = 1537$	$22 : 11 = 2$
$42 + 15 = 57$	$1537 * 3 = 4611$	$2 + 11 = 13$
$57 - 7 = 50$	$4611 + 4 = 4615$	$13 : 13 = 1$
$50 + 8 = 58$	$4615 * 1 = 4615$	$1 * 1 = 1$
$58 * 3 = 174$	$4615 + 9 = 4624$	$1 + 12 = 13$
$174 + 11 = 185$	$4624 + 6 = 4630$	$13 * 3 = 39$
$185 - 2 = 183$	$4630 : 2 = 2315$	$39 - 3 = 36$
$183 - 11 = 172$	$2315 + 5 = 2320$	$36 + 8 = 44$
$172 : 2 = 86$	$2320 : 2 = 1160$	
	$1 + 11 = 12$	

## Kopfrechnen (83)

$2 + 3 = 5$	$11 + 8 = 19$	$20 * 2 = 40$
$5 + 12 = 17$	$19 - 6 = 13$	$40 : 10 = 4$
$17 + 17 = 34$	$13 + 4 = 17$	$4 : 2 = 2$
$34 - 18 = 16$	$17 * 2 = 34$	$2 + 19 = 21$
$16 : 4 = 4$	$34 * 2 = 68$	$21 : 7 = 3$
$4 - 2 = 2$	$68 : 2 = 34$	$3 : 3 = 1$
$2 + 13 = 15$	$34 - 6 = 28$	$1 * 1 = 1$
$15 - 4 = 11$	$28 + 12 = 40$	$1 + 17 = 18$
$11 - 7 = 4$	$40 - 11 = 29$	$18 : 2 = 9$
$4 : 2 = 2$	$29 + 8 = 37$	$9 : 3 = 3$
$2 : 2 = 1$	$37 * 2 = 74$	$3 + 8 = 11$
$1 + 4 = 5$	$74 - 10 = 64$	$11 * 2 = 22$
$5 * 2 = 10$	$64 * 1 = 64$	$22 - 2 = 20$
$10 + 11 = 21$	$64 : 4 = 16$	$20 * 1 = 20$
$21 + 12 = 33$	$16 + 6 = 22$	$20 * 3 = 60$
$33 - 17 = 16$	$22 : 11 = 2$	$60 + 9 = 69$
$16 + 11 = 27$	$2 + 2 = 4$	$69 + 2 = 71$
$27 * 3 = 81$	$4 * 1 = 4$	$71 - 2 = 69$
$81 : 9 = 9$	$4 * 2 = 8$	$69 * 2 = 138$
$9 : 9 = 1$	$8 + 11 = 19$	$138 + 20 = 158$
$1 * 2 = 2$	$19 - 19 = 0$	$158 : 2 = 79$
$2 + 6 = 8$	$0 + 14 = 14$	$79 + 15 = 94$
$8 + 17 = 25$	$14 : 2 = 7$	$94 + 8 = 102$
$25 + 9 = 34$	$7 * 3 = 21$	$102 * 1 = 102$
$34 + 5 = 39$	$21 * 1 = 21$	$102 : 2 = 51$
$39 * 1 = 39$	$21 * 2 = 42$	$51 + 17 = 68$
$39 * 2 = 78$	$42 * 2 = 84$	$68 : 2 = 34$
$78 * 1 = 78$	$84 - 17 = 67$	$34 + 10 = 44$
$78 * 2 = 156$	$67 * 2 = 134$	$44 - 20 = 24$
$156 * 2 = 312$	$134 + 5 = 139$	$24 - 6 = 18$
$312 * 2 = 624$	$139 * 1 = 139$	$18 - 10 = 8$
$624 - 6 = 618$	$139 * 1 = 139$	$8 : 2 = 4$
$618 : 3 = 206$	$139 + 20 = 159$	$4 + 11 = 15$
$206 + 15 = 221$	$159 * 1 = 159$	$15 - 13 = 2$
$221 * 3 = 663$	$159 : 3 = 53$	$2 * 2 = 4$
$663 - 12 = 651$	$53 + 8 = 61$	$4 * 3 = 12$
$651 : 3 = 217$	$61 - 8 = 53$	$12 : 3 = 4$
$217 - 15 = 202$	$53 - 8 = 45$	
	$12 + 8 = 20$	

## Kopfrechnen (84)

$2 + 7 = 9$	$8 + 11 = 19$	$14 : 2 = 7$
$9 - 6 = 3$	$19 + 4 = 23$	$7 : 7 = 1$
$3 + 17 = 20$	$23 * 1 = 23$	$1 + 18 = 19$
$20 * 2 = 40$	$23 + 15 = 38$	$19 + 8 = 27$
$40 * 2 = 80$	$38 * 1 = 38$	$27 - 13 = 14$
$80 - 14 = 66$	$38 * 1 = 38$	$14 + 2 = 16$
$66 - 14 = 52$	$38 : 2 = 19$	$16 - 11 = 5$
$52 * 3 = 156$	$19 * 1 = 19$	$5 * 3 = 15$
$156 : 13 = 12$	$19 - 2 = 17$	$15 - 3 = 12$
$12 - 9 = 3$	$17 - 7 = 10$	$12 * 2 = 24$
$3 + 11 = 14$	$10 + 18 = 28$	$24 * 3 = 72$
$14 + 2 = 16$	$28 : 7 = 4$	$72 : 4 = 18$
$16 * 2 = 32$	$4 * 3 = 12$	$18 : 6 = 3$
$32 - 8 = 24$	$12 - 9 = 3$	$3 + 6 = 9$
$24 - 19 = 5$	$3 * 3 = 9$	$9 * 3 = 27$
$5 : 5 = 1$	$9 + 20 = 29$	$27 + 13 = 40$
$1 + 7 = 8$	$29 + 6 = 35$	$40 * 3 = 120$
$8 + 8 = 16$	$35 * 2 = 70$	$120 + 9 = 129$
$16 - 9 = 7$	$70 - 12 = 58$	$129 : 3 = 43$
$7 + 11 = 18$	$58 - 6 = 52$	$43 * 1 = 43$
$18 * 3 = 54$	$52 + 20 = 72$	$43 * 1 = 43$
$54 : 3 = 18$	$72 - 20 = 52$	$43 + 3 = 46$
$18 * 1 = 18$	$52 : 13 = 4$	$46 * 3 = 138$
$18 * 2 = 36$	$4 : 2 = 2$	$138 - 13 = 125$
$36 * 1 = 36$	$2 * 2 = 4$	$125 * 2 = 250$
$36 * 3 = 108$	$4 + 2 = 6$	$250 - 17 = 233$
$108 - 19 = 89$	$6 + 10 = 16$	$233 * 2 = 466$
$89 * 1 = 89$	$16 + 17 = 33$	$466 * 1 = 466$
$89 - 11 = 78$	$33 + 14 = 47$	$466 * 2 = 932$
$78 - 5 = 73$	$47 + 3 = 50$	$932 : 4 = 233$
$73 + 14 = 87$	$50 : 10 = 5$	$233 - 18 = 215$
$87 - 18 = 69$	$5 + 16 = 21$	$215 - 10 = 205$
$69 - 14 = 55$	$21 + 7 = 28$	$205 + 15 = 220$
$55 + 2 = 57$	$28 * 3 = 84$	$220 * 1 = 220$
$57 : 3 = 19$	$84 - 4 = 80$	$220 - 19 = 201$
$19 - 16 = 3$	$80 + 6 = 86$	$201 + 3 = 204$
$3 * 2 = 6$	$86 : 2 = 43$	$204 : 4 = 51$
$6 : 2 = 3$	$43 - 8 = 35$	
	$5 + 9 = 14$	

## Kopfrechnen (85)

$1 + 10 = 11$

$11 * 2 = 22$

$22 : 11 = 2$

$2 : 2 = 1$

$1 + 20 = 21$

$21 : 3 = 7$

$7 : 7 = 1$

$1 + 3 = 4$

$4 : 2 = 2$

$2 + 1 = 3$

$3 : 3 = 1$

$1 * 3 = 3$

$3 * 1 = 3$

$3 * 3 = 9$

$9 * 3 = 27$

$27 - 19 = 8$

$8 * 1 = 8$

$8 * 1 = 8$

$8 * 1 = 8$

$8 : 8 = 1$

$1 * 3 = 3$

$3 * 1 = 3$

$3 + 15 = 18$

$18 * 2 = 36$

$36 : 6 = 6$

$6 : 3 = 2$

$2 * 1 = 2$

$2 * 1 = 2$

$2 * 2 = 4$

$4 * 1 = 4$

$4 + 20 = 24$

$24 - 15 = 9$

$9 * 1 = 9$

$9 + 4 = 13$

$13 * 2 = 26$

$26 - 2 = 24$

$24 * 2 = 48$

$48 - 12 = 36$

$11 + 14 = 25$

$25 - 3 = 22$

$22 - 8 = 14$

$14 : 7 = 2$

$2 : 2 = 1$

$1 + 18 = 19$

$19 - 14 = 5$

$5 * 2 = 10$

$10 * 1 = 10$

$10 * 1 = 10$

$10 : 2 = 5$

$5 + 20 = 25$

$25 - 1 = 24$

$24 - 3 = 21$

$21 + 12 = 33$

$33 - 17 = 16$

$16 : 4 = 4$

$4 : 4 = 1$

$1 + 17 = 18$

$18 - 3 = 15$

$15 * 3 = 45$

$45 : 9 = 5$

$5 - 2 = 3$

$3 * 3 = 9$

$9 - 6 = 3$

$3 : 3 = 1$

$1 * 2 = 2$

$2 * 1 = 2$

$2 + 12 = 14$

$14 * 3 = 42$

$42 + 4 = 46$

$46 + 12 = 58$

$58 - 3 = 55$

$55 - 15 = 40$

$40 + 15 = 55$

$55 + 15 = 70$

$70 : 2 = 35$

$35 - 7 = 28$

$11 + 16 = 27$

$27 * 2 = 54$

$54 * 1 = 54$

$54 * 3 = 162$

$162 - 14 = 148$

$148 - 9 = 139$

$139 + 3 = 142$

$142 * 2 = 284$

$284 * 3 = 852$

$852 * 1 = 852$

$852 - 6 = 846$

$846 * 1 = 846$

$846 + 7 = 853$

$853 - 1 = 852$

$852 - 16 = 836$

$836 * 3 = 2508$

$2508 - 3 = 2505$

$2505 + 5 = 2510$

$2510 : 5 = 502$

$502 + 17 = 519$

$519 : 3 = 173$

$173 * 2 = 346$

$346 - 4 = 342$

$342 - 10 = 332$

$332 : 2 = 166$

$166 - 17 = 149$

$149 + 6 = 155$

$155 : 5 = 31$

$31 + 18 = 49$

$49 + 12 = 61$

$61 * 2 = 122$

$122 * 3 = 366$

$366 + 4 = 370$

$370 - 4 = 366$

$366 * 1 = 366$

$366 + 8 = 374$

$374 : 2 = 187$

$187 - 3 = 184$

## Kopfrechnen (86)

7 + 14 = 21  
21 \* 2 = 42  
42 - 11 = 31  
31 - 20 = 11  
11 \* 2 = 22  
22 - 2 = 20  
20 : 10 = 2  
2 : 2 = 1  
1 \* 3 = 3  
3 : 3 = 1  
1 + 13 = 14  
14 - 7 = 7  
7 \* 3 = 21  
21 : 3 = 7  
7 \* 3 = 21  
21 \* 3 = 63  
63 \* 1 = 63  
63 \* 1 = 63  
63 + 18 = 81  
81 + 10 = 91  
91 - 7 = 84  
84 + 3 = 87  
87 : 3 = 29  
29 \* 3 = 87  
87 : 3 = 29  
29 - 15 = 14  
14 \* 1 = 14  
14 : 2 = 7  
7 \* 1 = 7  
7 - 3 = 4  
4 : 4 = 1  
1 \* 2 = 2  
2 \* 3 = 6  
6 + 5 = 11  
11 \* 2 = 22  
22 : 2 = 11  
11 + 10 = 21  
21 - 16 = 5

10 + 8 = 18  
18 \* 2 = 36  
36 : 6 = 6  
6 - 4 = 2  
2 + 1 = 3  
3 : 3 = 1  
1 + 3 = 4  
4 \* 3 = 12  
12 + 3 = 15  
15 : 3 = 5  
5 + 8 = 13  
13 - 5 = 8  
8 \* 2 = 16  
16 + 5 = 21  
21 - 19 = 2  
2 + 6 = 8  
8 + 2 = 10  
10 : 5 = 2  
2 + 12 = 14  
14 : 7 = 2  
2 + 1 = 3  
3 : 3 = 1  
1 + 12 = 13  
13 \* 2 = 26  
26 - 11 = 15  
15 : 5 = 3  
3 + 15 = 18  
18 + 8 = 26  
26 \* 1 = 26  
26 - 16 = 10  
10 \* 1 = 10  
10 : 10 = 1  
1 + 2 = 3  
3 + 11 = 14  
14 \* 1 = 14  
14 : 2 = 7  
7 + 14 = 21  
21 - 17 = 4  
9 + 19 = 28

28 - 10 = 18  
18 : 3 = 6  
6 : 3 = 2  
2 + 19 = 21  
21 + 17 = 38  
38 + 5 = 43  
43 - 8 = 35  
35 - 10 = 25  
25 - 6 = 19  
19 - 3 = 16  
16 : 4 = 4  
4 + 15 = 19  
19 + 7 = 26  
26 : 13 = 2  
2 + 12 = 14  
14 - 13 = 1  
1 + 7 = 8  
8 \* 3 = 24  
24 + 12 = 36  
36 \* 2 = 72  
72 : 6 = 12  
12 : 2 = 6  
6 : 2 = 3  
3 \* 2 = 6  
6 \* 2 = 12  
12 \* 2 = 24  
24 \* 1 = 24  
24 : 4 = 6  
6 + 4 = 10  
10 - 1 = 9  
9 + 17 = 26  
26 + 2 = 28  
28 + 5 = 33  
33 : 11 = 3  
3 : 3 = 1  
1 + 12 = 13  
13 + 10 = 23

## Kopfrechnen (87)

$3 + 12 = 15$	$4 + 3 = 7$	$10 + 19 = 29$
$15 - 4 = 11$	$7 : 7 = 1$	$29 * 2 = 58$
$11 - 6 = 5$	$1 + 10 = 11$	$58 - 2 = 56$
$5 + 3 = 8$	$11 + 16 = 27$	$56 : 7 = 8$
$8 * 2 = 16$	$27 : 3 = 9$	$8 + 8 = 16$
$16 + 4 = 20$	$9 : 9 = 1$	$16 - 5 = 11$
$20 : 4 = 5$	$1 * 2 = 2$	$11 - 6 = 5$
$5 + 14 = 19$	$2 * 3 = 6$	$5 : 5 = 1$
$19 + 19 = 38$	$6 - 4 = 2$	$1 + 12 = 13$
$38 : 2 = 19$	$2 : 2 = 1$	$13 * 1 = 13$
$19 * 3 = 57$	$1 + 14 = 15$	$13 : 13 = 1$
$57 * 2 = 114$	$15 : 5 = 3$	$1 * 3 = 3$
$114 * 2 = 228$	$3 : 3 = 1$	$3 * 1 = 3$
$228 - 10 = 218$	$1 + 2 = 3$	$3 + 8 = 11$
$218 * 3 = 654$	$3 + 7 = 10$	$11 - 6 = 5$
$654 + 18 = 672$	$10 + 4 = 14$	$5 : 5 = 1$
$672 + 14 = 686$	$14 - 4 = 10$	$1 + 16 = 17$
$686 + 6 = 692$	$10 * 2 = 20$	$17 + 12 = 29$
$692 - 1 = 691$	$20 + 16 = 36$	$29 - 14 = 15$
$691 - 8 = 683$	$36 - 17 = 19$	$15 - 7 = 8$
$683 - 13 = 670$	$19 + 13 = 32$	$8 * 2 = 16$
$670 * 2 = 1340$	$32 * 1 = 32$	$16 + 7 = 23$
$1340 * 1 = 1340$	$32 : 4 = 8$	$23 * 3 = 69$
$1340 * 1 = 1340$	$8 * 1 = 8$	$69 : 3 = 23$
$1340 : 2 = 670$	$8 * 1 = 8$	$23 * 3 = 69$
$670 - 18 = 652$	$8 : 8 = 1$	$69 + 1 = 70$
$652 * 3 = 1956$	$1 + 10 = 11$	$70 - 16 = 54$
$1956 + 11 = 1967$	$11 : 11 = 1$	$54 + 15 = 69$
$1967 + 1 = 1968$	$1 - 1 = 0$	$69 - 3 = 66$
$1968 - 6 = 1962$	$0 + 9 = 9$	$66 * 2 = 132$
$1962 + 11 = 1973$	$9 - 8 = 1$	$132 - 4 = 128$
$1973 + 14 = 1987$	$1 * 3 = 3$	$128 - 11 = 117$
$1987 - 9 = 1978$	$3 + 8 = 11$	$117 : 9 = 13$
$1978 * 2 = 3956$	$3 + 8 = 11$	$13 * 3 = 39$
$3956 - 2 = 3954$	$11 + 3 = 14$	$39 + 11 = 50$
$3954 + 5 = 3959$	$14 - 7 = 7$	$50 : 10 = 5$
$3959 - 19 = 3940$	$7 + 7 = 14$	$5 * 3 = 15$
$3940 : 5 = 788$	$14 - 13 = 1$	
	$1 * 1 = 1$	
	$8 + 2 = 10$	

## Kopfrechnen (88)

$4 + 16 = 20$	$12 + 6 = 18$	$18 * 3 = 54$
$20 + 6 = 26$	$18 + 4 = 22$	$54 * 1 = 54$
$26 : 13 = 2$	$22 * 3 = 66$	$54 + 1 = 55$
$2 + 18 = 20$	$66 + 12 = 78$	$55 + 2 = 57$
$20 * 1 = 20$	$78 - 6 = 72$	$57 : 3 = 19$
$20 : 4 = 5$	$72 - 12 = 60$	$19 * 3 = 57$
$5 + 17 = 22$	$60 - 15 = 45$	$57 - 2 = 55$
$22 + 13 = 35$	$45 + 8 = 53$	$55 + 20 = 75$
$35 - 11 = 24$	$53 + 19 = 72$	$75 + 7 = 82$
$24 + 9 = 33$	$72 + 19 = 91$	$82 + 9 = 91$
$33 + 20 = 53$	$91 + 11 = 102$	$91 + 14 = 105$
$53 - 20 = 33$	$102 + 11 = 113$	$105 * 3 = 315$
$33 - 3 = 30$	$113 + 13 = 126$	$315 : 3 = 105$
$30 + 18 = 48$	$126 - 8 = 118$	$105 * 2 = 210$
$48 * 3 = 144$	$118 + 1 = 119$	$210 : 6 = 35$
$144 : 4 = 36$	$119 - 17 = 102$	$35 : 7 = 5$
$36 + 13 = 49$	$102 : 3 = 34$	$5 + 13 = 18$
$49 - 2 = 47$	$34 * 1 = 34$	$18 - 11 = 7$
$47 * 2 = 94$	$34 * 3 = 102$	$7 : 7 = 1$
$94 * 1 = 94$	$102 : 2 = 51$	$1 + 13 = 14$
$94 * 2 = 188$	$51 : 3 = 17$	$14 - 1 = 13$
$188 * 1 = 188$	$17 - 10 = 7$	$13 * 3 = 39$
$188 - 5 = 183$	$7 + 14 = 21$	$39 * 2 = 78$
$183 * 3 = 549$	$21 - 5 = 16$	$78 + 11 = 89$
$549 + 14 = 563$	$16 + 8 = 24$	$89 + 5 = 94$
$563 * 3 = 1689$	$24 - 11 = 13$	$94 + 4 = 98$
$1689 : 3 = 563$	$13 * 3 = 39$	$98 + 17 = 115$
$563 * 1 = 563$	$39 - 7 = 32$	$115 - 13 = 102$
$563 + 10 = 573$	$32 * 3 = 96$	$102 - 2 = 100$
$573 * 2 = 1146$	$96 + 20 = 116$	$100 * 3 = 300$
$1146 - 1 = 1145$	$116 + 14 = 130$	$300 * 3 = 900$
$1145 * 3 = 3435$	$130 : 10 = 13$	$900 * 2 = 1800$
$3435 + 11 = 3446$	$13 : 13 = 1$	$1800 + 16 = 1816$
$3446 + 16 = 3462$	$1 + 7 = 8$	$1816 * 1 = 1816$
$3462 * 3 = 10386$	$8 : 8 = 1$	$1816 + 16 = 1832$
$10386 * 3 = 31158$	$1 * 2 = 2$	$1832 - 18 = 1814$
$31158 - 20 = 31138$	$2 : 2 = 1$	$1814 + 7 = 1821$
$31138 * 2 = 62276$	$1 * 3 = 3$	
	$9 + 9 = 18$	



## Kopfrechnen (89)

$9 + 6 = 15$	$6 + 11 = 17$	$14 : 7 = 2$
$15 - 15 = 0$	$17 * 1 = 17$	$2 * 3 = 6$
$0 + 6 = 6$	$17 - 16 = 1$	$6 * 2 = 12$
$6 + 14 = 20$	$1 + 10 = 11$	$12 + 6 = 18$
$20 - 5 = 15$	$11 * 3 = 33$	$18 + 6 = 24$
$15 : 3 = 5$	$33 + 10 = 43$	$24 - 20 = 4$
$5 * 2 = 10$	$43 - 8 = 35$	$4 : 2 = 2$
$10 : 5 = 2$	$35 * 1 = 35$	$2 + 10 = 12$
$2 + 7 = 9$	$35 * 2 = 70$	$12 * 1 = 12$
$9 + 8 = 17$	$70 * 2 = 140$	$12 * 2 = 24$
$17 - 10 = 7$	$140 + 1 = 141$	$24 + 2 = 26$
$7 + 2 = 9$	$141 - 17 = 124$	$26 : 13 = 2$
$9 - 6 = 3$	$124 * 3 = 372$	$2 + 20 = 22$
$3 + 9 = 12$	$372 : 2 = 186$	$22 : 2 = 11$
$12 : 6 = 2$	$186 + 5 = 191$	$11 : 11 = 1$
$2 : 2 = 1$	$191 + 3 = 194$	$1 * 2 = 2$
$1 + 8 = 9$	$194 * 3 = 582$	$2 + 7 = 9$
$9 + 4 = 13$	$582 - 19 = 563$	$9 * 3 = 27$
$13 - 3 = 10$	$563 * 1 = 563$	$27 - 1 = 26$
$10 : 2 = 5$	$563 + 18 = 581$	$26 + 6 = 32$
$5 : 5 = 1$	$581 - 18 = 563$	$32 - 7 = 25$
$1 + 15 = 16$	$563 + 17 = 580$	$25 + 9 = 34$
$16 : 4 = 4$	$580 : 10 = 58$	$34 : 2 = 17$
$4 + 9 = 13$	$58 : 2 = 29$	$17 * 3 = 51$
$13 : 13 = 1$	$29 * 1 = 29$	$51 - 6 = 45$
$1 + 10 = 11$	$29 * 3 = 87$	$45 + 1 = 46$
$11 * 1 = 11$	$87 - 12 = 75$	$46 - 3 = 43$
$11 * 2 = 22$	$75 : 3 = 25$	$43 + 3 = 46$
$22 - 19 = 3$	$25 - 8 = 17$	$46 + 19 = 65$
$3 + 19 = 22$	$17 + 2 = 19$	$65 - 12 = 53$
$22 * 1 = 22$	$19 * 3 = 57$	$53 - 7 = 46$
$22 * 3 = 66$	$57 + 3 = 60$	$46 + 11 = 57$
$66 * 2 = 132$	$60 - 9 = 51$	$57 * 3 = 171$
$132 - 4 = 128$	$51 * 1 = 51$	$171 * 2 = 342$
$128 : 2 = 64$	$51 : 3 = 17$	$342 * 1 = 342$
$64 - 14 = 50$	$17 + 11 = 28$	$342 * 2 = 684$
$50 * 1 = 50$	$28 * 2 = 56$	$684 - 11 = 673$
$50 + 10 = 60$	$56 + 14 = 70$	
	$7 + 7 = 14$	

## Kopfrechnen (90)

$7 + 10 = 17$

$17 - 8 = 9$

$9 + 4 = 13$

$13 - 6 = 7$

$7 * 1 = 7$

$7 : 7 = 1$

$1 + 19 = 20$

$20 : 2 = 10$

$10 - 9 = 1$

$1 + 6 = 7$

$7 * 2 = 14$

$14 + 5 = 19$

$19 * 1 = 19$

$19 - 8 = 11$

$11 + 4 = 15$

$15 : 5 = 3$

$3 + 6 = 9$

$9 * 2 = 18$

$18 * 1 = 18$

$18 + 6 = 24$

$24 : 6 = 4$

$4 - 3 = 1$

$1 + 17 = 18$

$18 + 12 = 30$

$30 - 9 = 21$

$21 - 6 = 15$

$15 + 7 = 22$

$22 : 2 = 11$

$11 : 11 = 1$

$1 + 3 = 4$

$4 + 10 = 14$

$14 + 9 = 23$

$23 - 9 = 14$

$14 * 1 = 14$

$14 : 7 = 2$

$2 - 1 = 1$

$1 * 1 = 1$

$1 + 1 = 2$

$2 + 14 = 16$

$16 + 4 = 20$

$20 : 5 = 4$

$4 + 3 = 7$

$7 * 1 = 7$

$7 + 14 = 21$

$21 - 10 = 11$

$11 + 2 = 13$

$13 + 14 = 27$

$27 * 2 = 54$

$54 + 4 = 58$

$58 * 2 = 116$

$116 : 4 = 29$

$29 * 3 = 87$

$87 - 18 = 69$

$69 - 17 = 52$

$52 * 1 = 52$

$52 - 18 = 34$

$34 - 17 = 17$

$17 + 14 = 31$

$31 + 13 = 44$

$44 : 11 = 4$

$4 + 16 = 20$

$20 * 1 = 20$

$20 : 10 = 2$

$2 + 1 = 3$

$3 - 1 = 2$

$2 : 2 = 1$

$1 + 12 = 13$

$13 * 3 = 39$

$39 * 2 = 78$

$78 : 6 = 13$

$13 + 9 = 22$

$22 - 9 = 13$

$13 + 12 = 25$

$25 * 3 = 75$

$75 + 14 = 89$

$89 - 17 = 72$

$1 + 6 = 7$

$7 + 20 = 27$

$27 : 3 = 9$

$9 + 19 = 28$

$28 + 20 = 48$

$48 - 18 = 30$

$30 : 5 = 6$

$6 : 6 = 1$

$1 + 1 = 2$

$2 * 1 = 2$

$2 * 3 = 6$

$6 + 3 = 9$

$9 + 10 = 19$

$19 + 17 = 36$

$36 + 14 = 50$

$50 - 4 = 46$

$46 * 2 = 92$

$92 * 3 = 276$

$276 + 9 = 285$

$285 + 10 = 295$

$295 - 5 = 290$

$290 * 1 = 290$

$290 * 1 = 290$

$290 : 5 = 58$

$58 : 2 = 29$

$29 * 1 = 29$

$29 + 6 = 35$

$35 + 9 = 44$

$44 : 2 = 22$

$22 - 3 = 19$

$19 - 14 = 5$

$5 : 5 = 1$

$1 + 1 = 2$

$2 : 2 = 1$

$1 + 17 = 18$

$18 + 2 = 20$

$20 : 5 = 4$

$4 - 1 = 3$

## Kopfrechnen (91)

$11 + 1 = 12$   
 $12 : 2 = 6$   
 $6 + 11 = 17$   
 $17 - 11 = 6$   
 $6 + 10 = 16$   
 $16 : 8 = 2$   
 $2 + 5 = 7$   
 $7 * 3 = 21$   
 $21 * 3 = 63$   
 $63 - 18 = 45$   
 $45 : 3 = 15$   
 $15 : 3 = 5$   
 $5 * 2 = 10$   
 $10 * 1 = 10$   
 $10 - 8 = 2$   
 $2 * 2 = 4$   
 $4 : 4 = 1$   
 $1 * 2 = 2$   
 $2 * 1 = 2$   
 $2 * 3 = 6$   
 $6 : 2 = 3$   
 $3 + 11 = 14$   
 $14 + 10 = 24$   
 $24 + 17 = 41$   
 $41 * 1 = 41$   
 $41 - 9 = 32$   
 $32 - 12 = 20$   
 $20 - 16 = 4$   
 $4 : 2 = 2$   
 $2 + 8 = 10$   
 $10 + 11 = 21$   
 $21 * 1 = 21$   
 $21 - 15 = 6$   
 $6 + 11 = 17$   
 $17 * 1 = 17$   
 $17 + 14 = 31$   
 $31 * 3 = 93$   
 $93 - 1 = 92$

$1 + 17 = 18$   
 $18 - 8 = 10$   
 $10 + 20 = 30$   
 $30 * 2 = 60$   
 $60 : 5 = 12$   
 $12 : 2 = 6$   
 $6 * 1 = 6$   
 $6 * 1 = 6$   
 $6 * 2 = 12$   
 $12 * 1 = 12$   
 $12 : 3 = 4$   
 $4 : 2 = 2$   
 $2 * 3 = 6$   
 $6 * 1 = 6$   
 $6 + 8 = 14$   
 $14 + 15 = 29$   
 $29 * 3 = 87$   
 $87 + 17 = 104$   
 $104 + 18 = 122$   
 $122 - 8 = 114$   
 $114 * 2 = 228$   
 $228 : 12 = 19$   
 $19 * 3 = 57$   
 $57 * 2 = 114$   
 $114 : 2 = 57$   
 $57 : 3 = 19$   
 $19 - 16 = 3$   
 $3 * 3 = 9$   
 $9 : 3 = 3$   
 $3 * 1 = 3$   
 $3 : 3 = 1$   
 $1 * 2 = 2$   
 $2 + 2 = 4$   
 $4 * 1 = 4$   
 $4 + 3 = 7$   
 $7 + 10 = 17$   
 $17 - 6 = 11$   
 $11 + 20 = 31$   
 $11 + 11 = 22$

$22 : 11 = 2$   
 $2 * 3 = 6$   
 $6 - 1 = 5$   
 $5 : 5 = 1$   
 $1 - 1 = 0$   
 $0 + 18 = 18$   
 $18 * 3 = 54$   
 $54 + 13 = 67$   
 $67 + 15 = 82$   
 $82 + 1 = 83$   
 $83 * 3 = 249$   
 $249 + 16 = 265$   
 $265 : 5 = 53$   
 $53 - 13 = 40$   
 $40 : 2 = 20$   
 $20 * 1 = 20$   
 $20 * 1 = 20$   
 $20 * 3 = 60$   
 $60 - 17 = 43$   
 $43 - 15 = 28$   
 $28 - 9 = 19$   
 $19 + 8 = 27$   
 $27 + 5 = 32$   
 $32 - 7 = 25$   
 $25 * 2 = 50$   
 $50 : 2 = 25$   
 $25 + 15 = 40$   
 $40 + 8 = 48$   
 $48 - 2 = 46$   
 $46 - 2 = 44$   
 $44 - 14 = 30$   
 $30 + 4 = 34$   
 $34 * 3 = 102$   
 $102 - 11 = 91$   
 $91 + 11 = 102$   
 $102 : 6 = 17$   
 $17 * 2 = 34$

## Kopfrechnen (92)

$5 + 1 = 6$	$2 + 14 = 16$	$13 - 9 = 4$
$6 + 10 = 16$	$16 - 1 = 15$	$4 * 2 = 8$
$16 * 2 = 32$	$15 - 3 = 12$	$8 + 3 = 11$
$32 - 16 = 16$	$12 + 8 = 20$	$11 : 11 = 1$
$16 + 2 = 18$	$20 : 5 = 4$	$1 + 1 = 2$
$18 + 10 = 28$	$4 : 4 = 1$	$2 + 5 = 7$
$28 + 1 = 29$	$1 * 2 = 2$	$7 + 10 = 17$
$29 * 1 = 29$	$2 * 1 = 2$	$17 * 2 = 34$
$29 - 17 = 12$	$2 + 9 = 11$	$34 : 2 = 17$
$12 - 2 = 10$	$11 - 7 = 4$	$17 * 2 = 34$
$10 : 2 = 5$	$4 * 3 = 12$	$34 * 3 = 102$
$5 - 3 = 2$	$12 : 3 = 4$	$102 + 12 = 114$
$2 * 1 = 2$	$4 + 11 = 15$	$114 * 2 = 228$
$2 + 7 = 9$	$15 * 1 = 15$	$228 : 4 = 57$
$9 * 3 = 27$	$15 * 1 = 15$	$57 * 3 = 171$
$27 - 18 = 9$	$15 + 5 = 20$	$171 - 18 = 153$
$9 + 3 = 12$	$20 - 20 = 0$	$153 + 12 = 165$
$12 * 2 = 24$	$0 + 9 = 9$	$165 * 2 = 330$
$24 : 4 = 6$	$9 + 19 = 28$	$330 * 1 = 330$
$6 + 20 = 26$	$28 - 2 = 26$	$330 : 6 = 55$
$26 - 11 = 15$	$26 - 19 = 7$	$55 - 13 = 42$
$15 + 14 = 29$	$7 : 7 = 1$	$42 * 1 = 42$
$29 + 6 = 35$	$1 + 8 = 9$	$42 * 3 = 126$
$35 + 17 = 52$	$9 * 2 = 18$	$126 * 3 = 378$
$52 + 4 = 56$	$18 * 3 = 54$	$378 * 3 = 1134$
$56 - 13 = 43$	$54 + 16 = 70$	$1134 : 9 = 126$
$43 - 16 = 27$	$70 + 1 = 71$	$126 - 20 = 106$
$27 + 4 = 31$	$71 - 10 = 61$	$106 : 2 = 53$
$31 + 12 = 43$	$61 - 13 = 48$	$53 - 8 = 45$
$43 * 2 = 86$	$48 - 4 = 44$	$45 * 3 = 135$
$86 : 2 = 43$	$44 : 4 = 11$	$135 : 5 = 27$
$43 + 6 = 49$	$11 + 1 = 12$	$27 : 9 = 3$
$49 * 3 = 147$	$12 * 2 = 24$	$3 * 2 = 6$
$147 - 11 = 136$	$24 + 4 = 28$	$6 * 3 = 18$
$136 - 12 = 124$	$28 + 6 = 34$	$18 - 6 = 12$
$124 : 2 = 62$	$34 * 2 = 68$	$12 - 5 = 7$
$62 + 14 = 76$	$68 - 13 = 55$	$7 * 1 = 7$
$76 * 3 = 228$	$55 : 5 = 11$	
	$9 + 4 = 13$	

## Kopfrechnen (93)

$2 + 12 = 14$	$12 + 15 = 27$	$24 * 2 = 48$
$14 * 1 = 14$	$27 : 9 = 3$	$48 + 3 = 51$
$14 * 2 = 28$	$3 * 1 = 3$	$51 : 3 = 17$
$28 + 16 = 44$	$3 : 3 = 1$	$17 + 5 = 22$
$44 + 1 = 45$	$1 + 5 = 6$	$22 * 1 = 22$
$45 - 15 = 30$	$6 : 6 = 1$	$22 + 19 = 41$
$30 - 17 = 13$	$1 + 16 = 17$	$41 - 1 = 40$
$13 + 3 = 16$	$17 * 1 = 17$	$40 - 4 = 36$
$16 + 9 = 25$	$17 + 11 = 28$	$36 + 16 = 52$
$25 * 1 = 25$	$28 * 1 = 28$	$52 * 2 = 104$
$25 + 20 = 45$	$28 + 4 = 32$	$104 : 2 = 52$
$45 * 1 = 45$	$32 + 3 = 35$	$52 + 8 = 60$
$45 : 9 = 5$	$35 * 3 = 105$	$60 * 2 = 120$
$5 : 5 = 1$	$105 + 4 = 109$	$120 + 2 = 122$
$1 + 11 = 12$	$109 - 7 = 102$	$122 * 2 = 244$
$12 - 11 = 1$	$102 : 6 = 17$	$244 - 4 = 240$
$1 + 3 = 4$	$17 + 3 = 20$	$240 - 18 = 222$
$4 * 2 = 8$	$20 : 5 = 4$	$222 + 10 = 232$
$8 * 3 = 24$	$4 - 1 = 3$	$232 * 2 = 464$
$24 - 13 = 11$	$3 * 1 = 3$	$464 - 20 = 444$
$11 + 11 = 22$	$3 * 1 = 3$	$444 : 6 = 74$
$22 - 5 = 17$	$3 * 3 = 9$	$74 - 11 = 63$
$17 - 8 = 9$	$9 * 1 = 9$	$63 * 2 = 126$
$9 + 16 = 25$	$9 : 3 = 3$	$126 - 14 = 112$
$25 + 19 = 44$	$3 + 3 = 6$	$112 : 2 = 56$
$44 - 12 = 32$	$6 + 8 = 14$	$56 : 4 = 14$
$32 + 1 = 33$	$14 + 19 = 33$	$14 : 2 = 7$
$33 * 3 = 99$	$33 : 3 = 11$	$7 + 11 = 18$
$99 * 2 = 198$	$11 * 1 = 11$	$18 * 1 = 18$
$198 + 6 = 204$	$11 + 1 = 12$	$18 - 6 = 12$
$204 : 2 = 102$	$12 * 1 = 12$	$12 - 12 = 0$
$102 - 19 = 83$	$12 + 20 = 32$	$0 + 2 = 2$
$83 + 13 = 96$	$32 + 6 = 38$	$2 + 10 = 12$
$96 : 8 = 12$	$38 * 1 = 38$	$12 : 4 = 3$
$12 + 15 = 27$	$38 + 6 = 44$	$3 * 2 = 6$
$27 + 2 = 29$	$44 + 11 = 55$	$6 : 6 = 1$
$29 - 2 = 27$	$55 * 3 = 165$	$1 + 16 = 17$
$27 * 3 = 81$	$165 * 2 = 330$	
	$12 + 12 = 24$	

## Kopfrechnen (94)

$6 + 3 = 9$   
 $9 + 2 = 11$   
 $11 - 3 = 8$   
 $8 * 2 = 16$   
 $16 + 10 = 26$   
 $26 * 1 = 26$   
 $26 - 10 = 16$   
 $16 - 5 = 11$   
 $11 * 2 = 22$   
 $22 * 3 = 66$   
 $66 + 3 = 69$   
 $69 - 8 = 61$   
 $61 - 3 = 58$   
 $58 + 9 = 67$   
 $67 + 5 = 72$   
 $72 + 3 = 75$   
 $75 : 5 = 15$   
 $15 + 15 = 30$   
 $30 * 2 = 60$   
 $60 - 7 = 53$   
 $53 * 1 = 53$   
 $53 * 2 = 106$   
 $106 - 2 = 104$   
 $104 * 3 = 312$   
 $312 * 3 = 936$   
 $936 * 3 = 2808$   
 $2808 : 4 = 702$   
 $702 * 1 = 702$   
 $702 : 9 = 78$   
 $78 * 3 = 234$   
 $234 : 6 = 39$   
 $39 * 2 = 78$   
 $78 + 19 = 97$   
 $97 - 13 = 84$   
 $84 : 4 = 21$   
 $21 - 18 = 3$   
 $3 + 20 = 23$   
 $23 - 15 = 8$

$6 + 18 = 24$   
 $24 * 1 = 24$   
 $24 : 8 = 3$   
 $3 + 15 = 18$   
 $18 * 3 = 54$   
 $54 * 1 = 54$   
 $54 + 1 = 55$   
 $55 - 17 = 38$   
 $38 : 2 = 19$   
 $19 * 3 = 57$   
 $57 * 2 = 114$   
 $114 + 10 = 124$   
 $124 * 3 = 372$   
 $372 + 15 = 387$   
 $387 + 5 = 392$   
 $392 * 3 = 1176$   
 $1176 : 12 = 98$   
 $98 * 3 = 294$   
 $294 - 13 = 281$   
 $281 - 14 = 267$   
 $267 * 2 = 534$   
 $534 + 11 = 545$   
 $545 * 2 = 1090$   
 $1090 : 5 = 218$   
 $218 - 1 = 217$   
 $217 + 13 = 230$   
 $230 : 10 = 23$   
 $23 + 14 = 37$   
 $37 + 11 = 48$   
 $48 - 14 = 34$   
 $34 * 1 = 34$   
 $34 : 2 = 17$   
 $17 + 8 = 25$   
 $25 * 1 = 25$   
 $25 * 3 = 75$   
 $75 + 3 = 78$   
 $78 + 8 = 86$   
 $86 - 9 = 77$   
 $3 + 3 = 6$

$6 + 1 = 7$   
 $7 * 1 = 7$   
 $7 + 14 = 21$   
 $21 - 20 = 1$   
 $1 + 6 = 7$   
 $7 + 18 = 25$   
 $25 - 3 = 22$   
 $22 : 11 = 2$   
 $2 * 3 = 6$   
 $6 - 2 = 4$   
 $4 + 17 = 21$   
 $21 : 7 = 3$   
 $3 * 3 = 9$   
 $9 : 9 = 1$   
 $1 * 3 = 3$   
 $3 : 3 = 1$   
 $1 * 3 = 3$   
 $3 * 2 = 6$   
 $6 + 15 = 21$   
 $21 : 7 = 3$   
 $3 + 7 = 10$   
 $10 : 10 = 1$   
 $1 * 1 = 1$   
 $1 * 1 = 1$   
 $1 * 3 = 3$   
 $3 + 20 = 23$   
 $23 - 12 = 11$   
 $11 * 2 = 22$   
 $22 * 2 = 44$   
 $44 * 1 = 44$   
 $44 + 18 = 62$   
 $62 * 1 = 62$   
 $62 * 1 = 62$   
 $62 * 1 = 62$   
 $62 - 6 = 56$   
 $56 + 8 = 64$   
 $64 + 5 = 69$

## Kopfrechnen (95)

$1 + 16 = 17$

$17 * 2 = 34$

$34 + 9 = 43$

$43 - 5 = 38$

$38 + 8 = 46$

$46 + 1 = 47$

$47 * 3 = 141$

$141 - 4 = 137$

$137 * 1 = 137$

$137 - 19 = 118$

$118 * 3 = 354$

$354 + 12 = 366$

$366 : 2 = 183$

$183 * 3 = 549$

$549 + 9 = 558$

$558 - 11 = 547$

$547 * 1 = 547$

$547 * 2 = 1094$

$1094 * 2 = 2188$

$2188 : 4 = 547$

$547 - 6 = 541$

$541 * 3 = 1623$

$1623 : 3 = 541$

$541 - 1 = 540$

$540 - 9 = 531$

$531 * 1 = 531$

$531 : 3 = 177$

$177 : 3 = 59$

$59 - 7 = 52$

$52 * 1 = 52$

$52 - 17 = 35$

$35 - 17 = 18$

$18 - 3 = 15$

$15 + 2 = 17$

$17 * 3 = 51$

$51 * 1 = 51$

$51 * 2 = 102$

$102 : 3 = 34$

$6 + 15 = 21$

$21 * 2 = 42$

$42 * 2 = 84$

$84 + 4 = 88$

$88 + 15 = 103$

$103 * 1 = 103$

$103 * 2 = 206$

$206 - 3 = 203$

$203 - 8 = 195$

$195 * 3 = 585$

$585 * 3 = 1755$

$1755 + 8 = 1763$

$1763 - 14 = 1749$

$1749 * 3 = 5247$

$5247 - 16 = 5231$

$5231 - 20 = 5211$

$5211 : 3 = 1737$

$1737 - 4 = 1733$

$1733 + 2 = 1735$

$1735 : 5 = 347$

$347 * 3 = 1041$

$1041 : 3 = 347$

$347 * 2 = 694$

$694 - 7 = 687$

$687 - 5 = 682$

$682 - 5 = 677$

$677 + 7 = 684$

$684 - 19 = 665$

$665 : 5 = 133$

$133 : 7 = 19$

$19 * 2 = 38$

$38 - 20 = 18$

$18 + 5 = 23$

$23 - 16 = 7$

$7 * 2 = 14$

$14 : 7 = 2$

$2 * 3 = 6$

$6 - 1 = 5$

$8 + 11 = 19$

$19 * 1 = 19$

$19 * 2 = 38$

$38 - 15 = 23$

$23 + 3 = 26$

$26 - 20 = 6$

$6 - 1 = 5$

$5 + 14 = 19$

$19 - 12 = 7$

$7 : 7 = 1$

$1 * 1 = 1$

$1 * 3 = 3$

$3 * 2 = 6$

$6 + 11 = 17$

$17 + 17 = 34$

$34 - 13 = 21$

$21 - 12 = 9$

$9 + 4 = 13$

$13 * 3 = 39$

$39 * 2 = 78$

$78 : 2 = 39$

$39 - 5 = 34$

$34 * 2 = 68$

$68 + 5 = 73$

$73 + 8 = 81$

$81 - 18 = 63$

$63 + 1 = 64$

$64 - 3 = 61$

$61 * 2 = 122$

$122 + 15 = 137$

$137 - 11 = 126$

$126 - 18 = 108$

$108 * 3 = 324$

$324 * 1 = 324$

$324 : 9 = 36$

$36 * 3 = 108$

$108 : 9 = 12$

$12 : 3 = 4$

## Kopfrechnen (96)

$10 + 18 = 28$

$28 : 2 = 14$

$14 : 7 = 2$

$2 + 15 = 17$

$17 * 2 = 34$

$34 * 1 = 34$

$34 + 12 = 46$

$46 * 3 = 138$

$138 * 3 = 414$

$414 : 3 = 138$

$138 * 3 = 414$

$414 + 19 = 433$

$433 - 2 = 431$

$431 * 3 = 1293$

$1293 - 6 = 1287$

$1287 - 5 = 1282$

$1282 * 3 = 3846$

$3846 * 1 = 3846$

$3846 : 3 = 1282$

$1282 + 6 = 1288$

$1288 - 1 = 1287$

$1287 + 12 = 1299$

$1299 - 5 = 1294$

$1294 * 2 = 2588$

$2588 * 2 = 5176$

$5176 + 20 = 5196$

$5196 : 6 = 866$

$866 + 20 = 886$

$886 - 7 = 879$

$879 * 1 = 879$

$879 * 3 = 2637$

$2637 - 18 = 2619$

$2619 - 6 = 2613$

$2613 - 14 = 2599$

$2599 - 1 = 2598$

$2598 : 3 = 866$

$866 : 2 = 433$

$433 - 16 = 417$

$5 + 12 = 17$

$17 * 1 = 17$

$17 + 7 = 24$

$24 : 8 = 3$

$3 + 2 = 5$

$5 : 5 = 1$

$1 + 1 = 2$

$2 + 6 = 8$

$8 * 2 = 16$

$16 + 15 = 31$

$31 - 14 = 17$

$17 * 3 = 51$

$51 + 10 = 61$

$61 - 7 = 54$

$54 : 9 = 6$

$6 + 6 = 12$

$12 - 11 = 1$

$1 * 3 = 3$

$3 + 14 = 17$

$17 + 3 = 20$

$20 - 12 = 8$

$8 : 8 = 1$

$1 + 9 = 10$

$10 * 1 = 10$

$10 * 2 = 20$

$20 - 8 = 12$

$12 : 4 = 3$

$3 + 15 = 18$

$18 + 20 = 38$

$38 * 1 = 38$

$38 - 20 = 18$

$18 * 1 = 18$

$18 - 18 = 0$

$0 + 20 = 20$

$20 - 11 = 9$

$9 * 2 = 18$

$18 : 9 = 2$

$2 * 3 = 6$

$5 + 16 = 21$

$21 * 2 = 42$

$42 : 2 = 21$

$21 - 3 = 18$

$18 : 3 = 6$

$6 : 3 = 2$

$2 + 15 = 17$

$17 + 6 = 23$

$23 + 4 = 27$

$27 - 18 = 9$

$9 - 2 = 7$

$7 + 7 = 14$

$14 + 6 = 20$

$20 - 14 = 6$

$6 * 2 = 12$

$12 * 3 = 36$

$36 + 4 = 40$

$40 : 8 = 5$

$5 + 12 = 17$

$17 * 3 = 51$

$51 : 3 = 17$

$17 + 3 = 20$

$20 - 9 = 11$

$11 * 1 = 11$

$11 * 1 = 11$

$11 + 1 = 12$

$12 + 1 = 13$

$13 : 13 = 1$

$1 * 1 = 1$

$1 * 1 = 1$

$1 * 3 = 3$

$3 + 3 = 6$

$6 : 3 = 2$

$2 + 8 = 10$

$10 * 2 = 20$

$20 : 10 = 2$

$2 * 2 = 4$

$4 + 1 = 5$



## Kopfrechnen (97)

$4 + 15 = 19$	$1 + 12 = 13$	$17 + 11 = 28$
$19 - 18 = 1$	$13 : 13 = 1$	$28 : 2 = 14$
$1 * 1 = 1$	$1 + 6 = 7$	$14 : 7 = 2$
$1 * 1 = 1$	$7 * 2 = 14$	$2 + 16 = 18$
$1 + 4 = 5$	$14 : 2 = 7$	$18 : 3 = 6$
$5 : 5 = 1$	$7 : 7 = 1$	$6 + 18 = 24$
$1 * 1 = 1$	$1 + 10 = 11$	$24 + 18 = 42$
$1 * 1 = 1$	$11 - 4 = 7$	$42 - 9 = 33$
$1 + 8 = 9$	$7 * 2 = 14$	$33 : 11 = 3$
$9 + 7 = 16$	$14 : 2 = 7$	$3 : 3 = 1$
$16 + 17 = 33$	$7 * 3 = 21$	$1 * 3 = 3$
$33 + 15 = 48$	$21 * 2 = 42$	$3 * 3 = 9$
$48 - 13 = 35$	$42 : 2 = 21$	$9 - 7 = 2$
$35 + 2 = 37$	$21 - 18 = 3$	$2 * 2 = 4$
$37 + 3 = 40$	$3 + 16 = 19$	$4 + 1 = 5$
$40 + 5 = 45$	$19 * 2 = 38$	$5 * 2 = 10$
$45 * 2 = 90$	$38 + 7 = 45$	$10 + 5 = 15$
$90 : 2 = 45$	$45 : 5 = 9$	$15 * 3 = 45$
$45 + 14 = 59$	$9 * 2 = 18$	$45 * 3 = 135$
$59 - 10 = 49$	$18 * 3 = 54$	$135 + 5 = 140$
$49 + 13 = 62$	$54 * 2 = 108$	$140 * 1 = 140$
$62 + 19 = 81$	$108 + 12 = 120$	$140 + 6 = 146$
$81 + 16 = 97$	$120 + 12 = 132$	$146 + 5 = 151$
$97 * 1 = 97$	$132 * 3 = 396$	$151 * 1 = 151$
$97 * 3 = 291$	$396 - 2 = 394$	$151 * 3 = 453$
$291 * 3 = 873$	$394 : 2 = 197$	$453 + 15 = 468$
$873 + 8 = 881$	$197 - 4 = 193$	$468 : 9 = 52$
$881 * 3 = 2643$	$193 - 18 = 175$	$52 * 1 = 52$
$2643 : 3 = 881$	$175 * 2 = 350$	$52 + 14 = 66$
$881 * 3 = 2643$	$350 : 5 = 70$	$66 * 1 = 66$
$2643 * 2 = 5286$	$70 + 6 = 76$	$66 + 20 = 86$
$5286 - 12 = 5274$	$76 * 1 = 76$	$86 * 1 = 86$
$5274 + 2 = 5276$	$76 - 18 = 58$	$86 - 2 = 84$
$5276 + 19 = 5295$	$58 + 8 = 66$	$84 - 4 = 80$
$5295 + 15 = 5310$	$66 * 2 = 132$	$80 : 8 = 10$
$5310 - 15 = 5295$	$132 - 4 = 128$	$10 * 1 = 10$
$5295 + 19 = 5314$	$128 * 3 = 384$	$10 * 2 = 20$
$5314 * 3 = 15942$	$384 + 5 = 389$	
	$3 + 14 = 17$	

## Kopfrechnen (98)

$9 + 9 = 18$   
 $18 * 2 = 36$   
 $36 + 18 = 54$   
 $54 * 1 = 54$   
 $54 : 6 = 9$   
 $9 - 4 = 5$   
 $5 + 20 = 25$   
 $25 + 5 = 30$   
 $30 : 10 = 3$   
 $3 * 2 = 6$   
 $6 + 10 = 16$   
 $16 * 2 = 32$   
 $32 - 18 = 14$   
 $14 : 2 = 7$   
 $7 + 4 = 11$   
 $11 : 11 = 1$   
 $1 + 14 = 15$   
 $15 * 3 = 45$   
 $45 + 16 = 61$   
 $61 + 9 = 70$   
 $70 + 2 = 72$   
 $72 : 9 = 8$   
 $8 - 7 = 1$   
 $1 * 1 = 1$   
 $1 * 1 = 1$   
 $1 * 1 = 1$   
 $1 + 5 = 6$   
 $6 : 6 = 1$   
 $1 + 11 = 12$   
 $12 * 2 = 24$   
 $24 - 16 = 8$   
 $8 * 3 = 24$   
 $24 + 20 = 44$   
 $44 * 1 = 44$   
 $44 + 14 = 58$   
 $58 - 17 = 41$   
 $41 + 11 = 52$   
 $52 * 3 = 156$

$8 + 15 = 23$   
 $23 - 3 = 20$   
 $20 - 13 = 7$   
 $7 * 2 = 14$   
 $14 * 1 = 14$   
 $14 * 1 = 14$   
 $14 * 2 = 28$   
 $28 * 3 = 84$   
 $84 + 12 = 96$   
 $96 + 1 = 97$   
 $97 - 12 = 85$   
 $85 - 4 = 81$   
 $81 : 3 = 27$   
 $27 : 9 = 3$   
 $3 + 8 = 11$   
 $11 : 11 = 1$   
 $1 + 13 = 14$   
 $14 - 4 = 10$   
 $10 * 2 = 20$   
 $20 - 17 = 3$   
 $3 * 3 = 9$   
 $9 + 11 = 20$   
 $20 + 1 = 21$   
 $21 + 18 = 39$   
 $39 - 7 = 32$   
 $32 * 3 = 96$   
 $96 * 1 = 96$   
 $96 * 1 = 96$   
 $96 - 11 = 85$   
 $85 + 6 = 91$   
 $91 * 1 = 91$   
 $91 - 8 = 83$   
 $83 * 3 = 249$   
 $249 * 2 = 498$   
 $498 + 11 = 509$   
 $509 * 3 = 1527$   
 $1527 + 11 = 1538$   
 $1538 : 2 = 769$   
 $11 + 10 = 21$

$21 : 7 = 3$   
 $3 * 2 = 6$   
 $6 : 2 = 3$   
 $3 * 3 = 9$   
 $9 * 2 = 18$   
 $18 * 3 = 54$   
 $54 : 3 = 18$   
 $18 * 3 = 54$   
 $54 * 2 = 108$   
 $108 - 3 = 105$   
 $105 - 11 = 94$   
 $94 : 2 = 47$   
 $47 + 5 = 52$   
 $52 + 16 = 68$   
 $68 - 12 = 56$   
 $56 : 2 = 28$   
 $28 - 7 = 21$   
 $21 - 3 = 18$   
 $18 : 9 = 2$   
 $2 + 5 = 7$   
 $7 : 7 = 1$   
 $1 + 9 = 10$   
 $10 : 5 = 2$   
 $2 + 6 = 8$   
 $8 * 2 = 16$   
 $16 - 8 = 8$   
 $8 + 3 = 11$   
 $11 * 3 = 33$   
 $33 : 11 = 3$   
 $3 - 1 = 2$   
 $2 : 2 = 1$   
 $1 * 3 = 3$   
 $3 * 1 = 3$   
 $3 - 1 = 2$   
 $2 : 2 = 1$   
 $1 + 10 = 11$   
 $11 * 2 = 22$

## Kopfrechnen (99)

$7 + 1 = 8$	$10 + 1 = 11$	$11 - 7 = 4$
$8 : 8 = 1$	$11 * 1 = 11$	$4 : 2 = 2$
$1 + 2 = 3$	$11 - 3 = 8$	$2 * 1 = 2$
$3 * 3 = 9$	$8 * 1 = 8$	$2 + 3 = 5$
$9 : 3 = 3$	$8 : 2 = 4$	$5 * 2 = 10$
$3 : 3 = 1$	$4 : 2 = 2$	$10 + 1 = 11$
$1 * 3 = 3$	$2 + 1 = 3$	$11 + 3 = 14$
$3 + 20 = 23$	$3 * 2 = 6$	$14 + 18 = 32$
$23 * 3 = 69$	$6 : 3 = 2$	$32 - 18 = 14$
$69 : 3 = 23$	$2 * 1 = 2$	$14 - 10 = 4$
$23 + 17 = 40$	$2 * 2 = 4$	$4 - 4 = 0$
$40 * 2 = 80$	$4 * 1 = 4$	$0 + 3 = 3$
$80 + 7 = 87$	$4 + 20 = 24$	$3 * 2 = 6$
$87 : 3 = 29$	$24 : 12 = 2$	$6 : 3 = 2$
$29 - 7 = 22$	$2 * 1 = 2$	$2 + 11 = 13$
$22 - 14 = 8$	$2 * 3 = 6$	$13 + 20 = 33$
$8 * 3 = 24$	$6 : 3 = 2$	$33 : 3 = 11$
$24 * 3 = 72$	$2 : 2 = 1$	$11 + 17 = 28$
$72 - 15 = 57$	$1 + 11 = 12$	$28 * 3 = 84$
$57 * 1 = 57$	$12 * 3 = 36$	$84 - 20 = 64$
$57 : 3 = 19$	$36 * 3 = 108$	$64 - 5 = 59$
$19 + 2 = 21$	$108 + 12 = 120$	$59 * 2 = 118$
$21 + 8 = 29$	$120 : 8 = 15$	$118 * 1 = 118$
$29 + 11 = 40$	$15 * 2 = 30$	$118 * 2 = 236$
$40 : 4 = 10$	$30 + 5 = 35$	$236 - 3 = 233$
$10 + 14 = 24$	$35 + 19 = 54$	$233 - 11 = 222$
$24 - 2 = 22$	$54 - 19 = 35$	$222 + 16 = 238$
$22 : 11 = 2$	$35 - 13 = 22$	$238 + 9 = 247$
$2 + 6 = 8$	$22 : 11 = 2$	$247 * 3 = 741$
$8 : 4 = 2$	$2 * 3 = 6$	$741 + 6 = 747$
$2 + 6 = 8$	$6 * 1 = 6$	$747 + 7 = 754$
$8 : 8 = 1$	$6 : 3 = 2$	$754 * 2 = 1508$
$1 + 3 = 4$	$2 * 1 = 2$	$1508 * 3 = 4524$
$4 * 3 = 12$	$2 + 7 = 9$	$4524 - 16 = 4508$
$12 : 6 = 2$	$9 * 1 = 9$	$4508 + 6 = 4514$
$2 * 3 = 6$	$9 - 5 = 4$	$4514 * 2 = 9028$
$6 * 3 = 18$	$4 : 2 = 2$	$9028 + 4 = 9032$
$18 - 9 = 9$	$2 : 2 = 1$	
	$10 + 1 = 11$	

## Kopfrechnen (100)

$1 + 18 = 19$   
 $19 - 8 = 11$   
 $11 : 11 = 1$   
 $1 + 11 = 12$   
 $12 * 3 = 36$   
 $36 : 6 = 6$   
 $6 : 2 = 3$   
 $3 * 3 = 9$   
 $9 + 10 = 19$   
 $19 * 2 = 38$   
 $38 - 19 = 19$   
 $19 * 1 = 19$   
 $19 + 3 = 22$   
 $22 - 7 = 15$   
 $15 : 5 = 3$   
 $3 + 17 = 20$   
 $20 : 5 = 4$   
 $4 : 4 = 1$   
 $1 * 3 = 3$   
 $3 : 3 = 1$   
 $1 * 2 = 2$   
 $2 + 14 = 16$   
 $16 * 2 = 32$   
 $32 - 19 = 13$   
 $13 + 13 = 26$   
 $26 - 20 = 6$   
 $6 : 6 = 1$   
 $1 * 3 = 3$   
 $3 + 18 = 21$   
 $21 * 1 = 21$   
 $21 : 3 = 7$   
 $7 : 7 = 1$   
 $1 * 2 = 2$   
 $2 * 3 = 6$   
 $6 : 2 = 3$   
 $3 + 17 = 20$   
 $20 - 6 = 14$   
 $14 - 13 = 1$

$5 + 17 = 22$   
 $22 - 16 = 6$   
 $6 : 6 = 1$   
 $1 + 7 = 8$   
 $8 * 1 = 8$   
 $8 * 1 = 8$   
 $8 + 4 = 12$   
 $12 + 7 = 19$   
 $19 * 2 = 38$   
 $38 + 8 = 46$   
 $46 - 6 = 40$   
 $40 + 16 = 56$   
 $56 : 7 = 8$   
 $8 + 19 = 27$   
 $27 : 3 = 9$   
 $9 : 9 = 1$   
 $1 * 3 = 3$   
 $3 + 15 = 18$   
 $18 * 3 = 54$   
 $54 + 9 = 63$   
 $63 * 3 = 189$   
 $189 : 7 = 27$   
 $27 - 3 = 24$   
 $24 - 5 = 19$   
 $19 - 18 = 1$   
 $1 * 1 = 1$   
 $1 * 3 = 3$   
 $3 * 1 = 3$   
 $3 * 2 = 6$   
 $6 + 19 = 25$   
 $25 - 13 = 12$   
 $12 : 12 = 1$   
 $1 + 11 = 12$   
 $12 + 6 = 18$   
 $18 + 5 = 23$   
 $23 - 15 = 8$   
 $8 + 16 = 24$   
 $24 * 2 = 48$   
 $8 + 1 = 9$

$9 - 1 = 8$   
 $8 : 8 = 1$   
 $1 * 1 = 1$   
 $1 * 3 = 3$   
 $3 * 2 = 6$   
 $6 - 6 = 0$   
 $0 + 19 = 19$   
 $19 - 15 = 4$   
 $4 * 2 = 8$   
 $8 + 13 = 21$   
 $21 - 4 = 17$   
 $17 + 4 = 21$   
 $21 - 8 = 13$   
 $13 - 13 = 0$   
 $0 + 4 = 4$   
 $4 + 9 = 13$   
 $13 + 7 = 20$   
 $20 - 18 = 2$   
 $2 : 2 = 1$   
 $1 * 3 = 3$   
 $3 * 1 = 3$   
 $3 + 8 = 11$   
 $11 - 3 = 8$   
 $8 + 20 = 28$   
 $28 : 7 = 4$   
 $4 : 4 = 1$   
 $1 + 2 = 3$   
 $3 + 2 = 5$   
 $5 + 8 = 13$   
 $13 - 11 = 2$   
 $2 : 2 = 1$   
 $1 * 3 = 3$   
 $3 + 11 = 14$   
 $14 + 7 = 21$   
 $21 - 13 = 8$   
 $8 - 3 = 5$   
 $5 : 5 = 1$