

Number Conversion Fun Stuff

| Binary | Decimal | HEX |
|--------------|---------|-----|
| 000011001011 | | |
| 101100011111 | | |
| 000000110101 | | |
| 000010000011 | | |
| 101100101101 | | |
| 000111110100 | | |
| 000001001110 | | |
| 011011010001 | | |
| 000000010100 | | |
| 000011101010 | | |
| 111100001111 | | |
| 000010101010 | | |
| 101101111011 | | |
| 000001010101 | | |
| 000000110100 | | |
| 010101010101 | | |
| 000011110001 | | |
| 000001001011 | | |
| 000000000010 | | |
| 000000110110 | | |
| 000011101110 | | |
| 000011001111 | | |
| 101010101010 | | |
| 000000101101 | | |
| 001011110111 | | |
| 000000110010 | | |
| 000011010111 | | |
| 010111110000 | | |
| 000001111101 | | |
| 000011000100 | | |
| 000110011001 | | |
| 000000001011 | | |
| 000011111111 | | |
| 000000010000 | | |
| 110010101101 | | |
| 000011011011 | | |
| 000010000110 | | |
| 000011111000 | | |
| 001011010111 | | |
| 000000010110 | | |
| 000001100101 | | |
| 000001011101 | | |

Number Conversion Fun Stuff

| Binary | Decimal | HEX |
|--------|---------|-----|
| | 213 | |
| | 9 | |
| | 67 | |
| | 99 | |
| | 23 | |
| | 143 | |
| | 6 | |
| | 1 | |
| | 398 | |
| | 197 | |
| | 254 | |
| | 25 | |
| | 237 | |
| | 510 | |
| | 172 | |
| | 138 | |
| | 69 | |
| | 467 | |
| | 73 | |
| | 235 | |
| | 17 | |
| | 386 | |
| | 163 | |
| | 277 | |
| | 201 | |
| | 4 | |
| | 233 | |
| | 21 | |
| | 188 | |
| | 489 | |
| | 56 | |
| | 94 | |
| | 64 | |
| | 502 | |
| | 159 | |
| | 253 | |
| | 499 | |
| | 90 | |
| | 183 | |
| | 111 | |
| | 44 | |

Number Conversion Fun Stuff

| Binary | Decimal | HEX |
|--------|---------|-----|
| | | 0DD |
| | | 094 |
| | | 0F7 |
| | | 1A3 |
| | | 0BF |
| | | 0A4 |
| | | 04A |
| | | 9FD |
| | | 0F5 |
| | | 047 |
| | | 0B8 |
| | | 0B4 |
| | | F5E |
| | | 0CD |
| | | 879 |
| | | 0FC |
| | | 066 |
| | | 0FA |
| | | 0E1 |
| | | 6C3 |
| | | 03D |
| | | 0C6 |
| | | 06A |
| | | 0F9 |
| | | 7E3 |
| | | 013 |
| | | 0EC |
| | | 090 |
| | | 80B |
| | | 018 |
| | | 0A6 |
| | | 057 |
| | | 0C2 |
| | | 048 |
| | | 0F0 |
| | | 0CC |
| | | 6D9 |
| | | 0CA |
| | | 09A |
| | | 007 |
| | | 0D6 |
| | | 085 |

Number Conversion Answers

| Binary | Decimal | HEX |
|--------------|---------|-----|
| 000011001011 | 203 | 0CB |
| 101100011111 | 2847 | B1F |
| 000000110101 | 53 | 035 |
| 000010000011 | 131 | 083 |
| 101100101101 | 2861 | B2D |
| 000111110100 | 500 | 1F4 |
| 000001001110 | 78 | 04E |
| 011011010001 | 1745 | 6D1 |
| 000000010100 | 20 | 014 |
| 000011101010 | 234 | 0EA |
| 111100001111 | 3855 | F0F |
| 000010101010 | 170 | 0AA |
| 101101111011 | 2939 | B7B |
| 000001010101 | 85 | 055 |
| 000000110100 | 52 | 034 |
| 010101010101 | 1365 | 555 |
| 000011110001 | 241 | 0F1 |
| 000001001011 | 75 | 04B |
| 000000000010 | 2 | 002 |
| 000000110110 | 54 | 036 |
| 000011101110 | 238 | 0EE |
| 000011001111 | 207 | 0CF |
| 101010101010 | 2730 | AAA |
| 000000101101 | 45 | 02D |
| 001011110111 | 759 | 2F7 |
| 000000110010 | 50 | 032 |
| 000011010111 | 215 | 0D7 |
| 010111110000 | 1520 | 5F0 |
| 000001111101 | 125 | 07D |
| 000011000100 | 196 | 0C4 |
| 000110011001 | 409 | 199 |
| 000000001011 | 11 | 00B |
| 000011111111 | 255 | 0FF |
| 000000010000 | 16 | 010 |
| 110010101101 | 3245 | CAD |
| 000011011011 | 219 | 0DB |
| 000010000110 | 134 | 086 |
| 000011111000 | 248 | 0F8 |
| 001011010111 | 727 | 2D7 |
| 000000010110 | 22 | 016 |
| 000001100101 | 101 | 065 |
| 000001011101 | 93 | 05D |

Number Conversion Answers

| Binary | Decimal | HEX |
|------------|---------|-----|
| 0011010101 | 213 | 0D5 |
| 0000001001 | 9 | 009 |
| 0001000011 | 67 | 043 |
| 0001100011 | 99 | 063 |
| 0000010111 | 23 | 017 |
| 0010001111 | 143 | 08F |
| 0000000110 | 6 | 006 |
| 0000000001 | 1 | 001 |
| 0110001110 | 398 | 18E |
| 0011000101 | 197 | 0C5 |
| 0011111110 | 254 | 0FE |
| 0000011001 | 25 | 019 |
| 0011101101 | 237 | 0ED |
| 0111111110 | 510 | 1FE |
| 0010101100 | 172 | 0AC |
| 0010001010 | 138 | 08A |
| 0001000101 | 69 | 045 |
| 0111010011 | 467 | 1D3 |
| 0001001001 | 73 | 49 |
| 0011101011 | 235 | 0EB |
| 0000010001 | 17 | 011 |
| 0110000010 | 386 | 182 |
| 0010100011 | 163 | 0A3 |
| 0100010101 | 277 | 115 |
| 0011001001 | 201 | 0C9 |
| 0000000100 | 4 | 004 |
| 0011101001 | 233 | 0E9 |
| 0000010101 | 21 | 015 |
| 0010111100 | 188 | 0BC |
| 0111101001 | 489 | 1E9 |
| 0000111000 | 56 | 038 |
| 0001011110 | 94 | 05E |
| 0001000000 | 64 | 040 |
| 0111110110 | 502 | 1F6 |
| 0010011111 | 159 | 09F |
| 0011111101 | 253 | 0FD |
| 0111110011 | 499 | 1F3 |
| 0001011010 | 90 | 05A |
| 0010110111 | 183 | 0B7 |
| 0001101111 | 111 | 06F |
| 0000101100 | 44 | 02C |

Number Conversion Answers

| Binary | Decimal | HEX |
|--------------|---------|-----|
| 000011011101 | 221 | 0DD |
| 000010010100 | 148 | 094 |
| 000011110111 | 247 | 0F7 |
| 000110100011 | 419 | 1A3 |
| 000010111111 | 191 | 0BF |
| 000010100100 | 164 | 0A4 |
| 000001001010 | 74 | 04A |
| 100111111101 | 2557 | 9FD |
| 000011110101 | 245 | 0F5 |
| 000001000111 | 71 | 047 |
| 000010111000 | 184 | 0B8 |
| 000010110100 | 180 | 0B4 |
| 111101011110 | 3934 | F5E |
| 000011001101 | 205 | 0CD |
| 100001111001 | 2169 | 879 |
| 000011111100 | 252 | 0FC |
| 000001100110 | 102 | 066 |
| 000011111010 | 250 | 0FA |
| 000011100001 | 225 | 0E1 |
| 011011000011 | 1731 | 6C3 |
| 000000111101 | 61 | 03D |
| 000011000110 | 198 | 0C6 |
| 000001101010 | 106 | 06A |
| 000011111001 | 249 | 0F9 |
| 011111100011 | 2019 | 7E3 |
| 000000010011 | 19 | 013 |
| 000011101100 | 236 | 0EC |
| 000010010000 | 144 | 090 |
| 100000001011 | 2059 | 80B |
| 000000011000 | 24 | 018 |
| 000010100110 | 166 | 0A6 |
| 000001010111 | 87 | 057 |
| 000011000010 | 194 | 0C2 |
| 000001001000 | 72 | 048 |
| 000011110000 | 240 | 0F0 |
| 000011001100 | 204 | 0CC |
| 011011011001 | 1753 | 6D9 |
| 000011001010 | 202 | 0CA |
| 000010011010 | 154 | 09A |
| 000000000111 | 7 | 007 |
| 000011010110 | 214 | 0D6 |
| 000010000101 | 133 | 085 |

Subnetting Fun

| Address | Subnet | Default Subnet | CIDR | Class | Network Portion | Host Portion | # of Subnets | Total # of Host Addresses | Number of bits borrowed |
|-----------------|-----------------|-----------------|------|-------|-----------------|--------------|--------------|---------------------------|-------------------------|
| 177.100.18.4 | 255.255.255.0 | 255.255.0.0 | /24 | B | 177.100.18.0 | 0.0.0.4 | 256 | 256 | 8 |
| 10.15.163.4 | 255.192.0.0 | 255.0.0.0 | /10 | A | 10.15.0.0 | 0.0.163.4 | 4 | 4194302 | 2 |
| 198.5.31.8 | 255.255.255.128 | 255.255.255.0 | /25 | C | 198.5.31.0 | 0.0.0.8 | 2 | 126 | 1 |
| 170.211.196.253 | 255.255.224.0 | 255.255.0.0 | /19 | B | 170.211.196 | 0.0.0.253 | 8 | 8190 | 3 |
| 192.16.5.9 | 255.255.255.0 | 255.255.255.0 | /24 | C | 192.16.5.0 | 0.0.0.9 | 1 | 254 | 0 |
| 203.33.129.57 | 255.255.255.224 | 255.255.255.0 | /27 | C | 203.33.129.0 | 0.0.0.57 | 8 | 30 | 3 |
| 10.121.13.241 | 255.255.128.0 | 255.0.0.0 | /17 | A | 10.121.13.0 | 0.0.0.241 | 512 | 32766 | 9 |
| 219.252.12.215 | 255.255.255.128 | 255.255.255.0 | /25 | C | 219.252.12.0 | 0.0.0.215 | 2 | 126 | 1 |
| 233.8.240.65 | 255.255.255.252 | 255.255.255.0 | /30 | C | 223.8.240.0 | 0.0.0.65 | 64 | 2 | 6 |
| 206.163.139.20 | 255.255.255.224 | 255.255.255.224 | /27 | C | 206.163.139.0 | 0.0.0.20 | 8 | 30 | 3 |
| 126.2.41.19 | 255.255.255.192 | 255.0.0.0 | /26 | A | 126.2.41.0 | 0.0.0.19 | 262144 | 62 | 18 |
| 172.16.0.1 | 255.255.224.0 | 255.255.0.0 | /19 | B | 172.16.0.0 | 0.0.0.1 | 8 | 8190 | 3 |
| 193.240.155.30 | 255.255.255.0 | 255.255.255.0 | /24 | C | 193.240.155.0 | 0.0.0.30 | 1 | 254 | 0 |
| 223.22.238.80 | 255.255.255.252 | 255.255.255.0 | /30 | C | 223.22.238.0 | 0.0.0.80 | 64 | 2 | 6 |
| 133.6.19.1 | 255.255.255.192 | 255.255.0.0 | /26 | B | 133.6.19.0 | 0.0.0.1 | 1024 | 62 | 10 |
| 177.171.224.93 | 255.255.192.0 | 255.255.0.0 | /18 | B | 177.171.224.0 | 0.0.0.93 | 4 | 16382 | 2 |
| 123.59.76.186 | 255.255.128.0 | 255.0.0.0 | /17 | A | 123.59.0.0 | 0.0.78.186 | 512 | 32766 | 9 |
| 1.222.40.136 | 255.128.0.0 | 255.0.0.0 | /9 | A | 1.222.0.0 | 0.0.40.136 | 2 | 8388606 | 1 |
| 179.96.160.94 | 255.255.252 | 255.255.0.0 | /22 | B | 179.96.160.0 | 0.0.0.94 | 64 | 1022 | 6 |
| 222.101.93.30 | 255.255.255.0 | 255.255.255.0 | /24 | C | 222.101.93.0 | 0.0.0.30 | 1 | 254 | 0 |
| 209.78.95.135 | 255.255.255.224 | 255.255.255.0 | /27 | C | 209.78.95.0 | 0.0.0.135 | 8 | 30 | 3 |
| 200.78.214.207 | 255.255.255.128 | 255.255.255.0 | /25 | C | 200.78.214.0 | 0.0.0.207 | 2 | 126 | 1 |
| 187.136.10.18 | 255.255.240.0 | 255.255.0.0 | /20 | B | 187.136.0.0 | 0.0.10.18 | 16 | 4094 | 4 |
| 197.9.203.186 | 255.255.255.128 | 255.255.255.0 | /18 | C | 197.9.203.0 | 0.0.0.186 | 2 | 126 | 1 |
| 188.15.33.204 | 255.255.255.248 | 255.255.255.0 | /29 | C | 188.15.33.0 | 0.0.0.204 | 32 | 6 | 5 |
| 170.206.90.238 | 255.255.248.0 | 255.255.0.0 | /21 | B | 170.206.90.0 | 0.0.0.238 | 32 | 2046 | 5 |
| 191.48.164.223 | 255.255.255.240 | 255.255.255.0 | /28 | C | 191.48.168.0 | 0.0.0.223 | 16 | 14 | 4 |
| 114.52.91.38 | 255.255.255.224 | 255.0.0.0 | /27 | A | 114.52.91.0 | 0.0.0.38 | 524288 | 30 | 19 |