

Convert the following decimal numbers into binary:

25

Solution...

We gonna divide the decimal number by 2 and collect the reminders as the answer.

$25/2$ result = 12 and remainder 1 so, we take the answer and do the division again and so on...

$12/2 = 6$ and remainder 0

$6/2 = 3$ and remainder 0

$3/2 = 1$ and remainder 1

$1/2 = 0$ and remainder 1

now we gonna insert first reminder value to the right side, and write the fall binary number as >>
11001

100

Solution...

$100/2=50$ with remainder 0

$50/2=25$ with remainder 0

$25/2=12$ with remainder 1

$12/2=6$ with remainder 0

$6/2=3$ with remainder 0

$3/2=1$ with remainder 1

$1/2=0$ with remainder 1

answer >> 110010

255

Solution...

$255/2=127$ with remainder 1

$127/2=63$ with remainder 1

$63/2=31$ with remainder 1

$31/2=15$ with remainder 1

$15/2=7$ with remainder 1

$7/2=3$ with remainder 1

$3/2=1$ with remainder 1

$1/2=0$ with remainder 1

answer >> 11111111

1024

Solution...

$1024/2=512$ with remainder 0

$512/2=256$ with remainder 0

$256/2=128$ with remainder 0

$128/2=64$ with remainder 0

$64/2=32$ with remainder 0

$32/2=16$ with remainder 0

$16/2=8$ with remainder 0

$8/2=4$ with remainder 0

$4/2=2$ with remainder 0

$2/2=1$ with remainder 0

$1/2=0$ with remainder 1

answer >> 10000000000