

$$1.0 = 1.0 \times 2^0:$$

fraction after removing hidden bit = 000000000000000000000000

true exponent = 0; stored exponent =  $127_{10} = 01111111$

0 01111111 000000000000000000000000

$$- 0.375_{10} = - 0.011_2 = - 1.1_2 \times 2^{-2}$$

fraction after removing hidden bit = 100000000000000000000000

true exponent = -2; stored exponent =  $125_{10} = 01111101$

negative number

1 01111101 100000000000000000000000

1 10000011 110000000000000000000000

negative number

stored exponent =  $131_{10}$ ; true exponent =  $4_{10}$

mantissa with hidden bit restored = 1.11

mantissa after applying exponent -  $11100 = 28_{10}$

$-28_{10}$