Answer: Single precision Floating point

1 bit for sign
8 bit for Exponent
23 bit for Fraction.

-47.7

(1) First Convert 47 to binary

	Quotient	Remainder
47 /2	23	1
23/2	11	1
11 /2	5	1
5/2	2	1
2/2	1	0
1 /2	0	1

So, 47 D = 101111 B.

(2) Now Convert 0.7.

$0.7 * 2 = 1.4$ [1]
$0.4 * 2 = 0.8$ [0]
$0.8 * 2 = 1.6$ [1]
$0.6 * 2 = 1.2$ [1]
$0.2 * 2 = 0.4$ [0]
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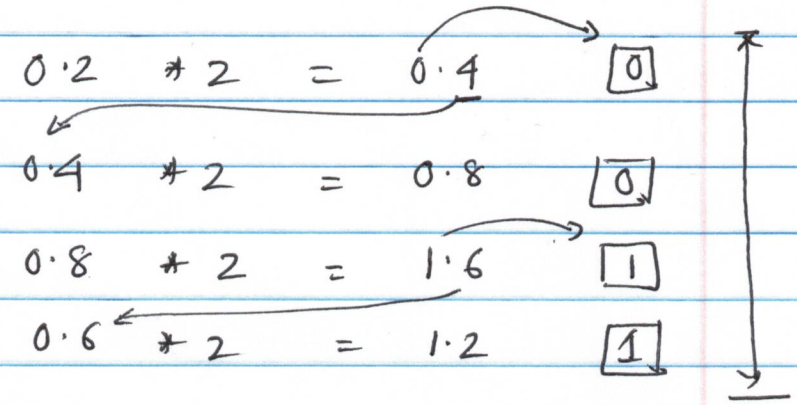

if we continue, 0011 will repeat.

So, $0.7_D = 0.1011\,0011\,0011\,0011\,0011\,0011_B$

So $-47.7 = -101111.1011\,0011\,0011\,0011\,0011\,0011_B$

=

After normalizing,

$$-1.01111\,1011\,0011\,0011\,0011\,00 \times 2^5$$

(23 digits)

1	10000100	01111101100110011001100

Exponent = 5 + 127 (=Adding bias)

= 132

$132_D = 10000100_B$.