

```

      -3.5      --> 1 - 1000 0000 (1) 110 0000
x    5.250     --> 0 - 1000 0001 (1) 010 1000
-----
      -18.375 (expected)

```

1 XOR 0 = 1 <-- sign of result is negative

tentative exponent = 1 + 2 = 3

```

      1110 0000
x    1010 1000
-----

```

```

      1111 1
      0000 0000 0000 0000
      0000 0000 0000 0000
      0000 0000 0000 0000
      0000 0111 0000 0000
      0000 0000 0000 0000
      0001 1100 0000 0000
      0000 0000 0000 0000
      0111 0000 0000 0000
      -----
      1223 2211 0000 0000

```

```

%2  1001 0011 0000 0000
    ^

```

16th bit is 1, hence, add 1 to tentative exponent to get final exponent

=> final exponent = 3 + 1 = 4

1 - 10000011 (1) 001 0011

1.0010011 * 2^4 = 10010.011 = -18.375 (expected)