**No sistema decimal, qual é o valor correspondente a 0 10000010 00000011100000000000000?**

S = 0

E = 1000 0010 = 2^7 + 2^1 = 130

Exp = 130 – 127 = 3

Mantissa = 1,00000011100000000000000

1000,00011100000000000000 = 2^3 + 2^(-4) + 2^(-5) + 2^(-6) = **8,109375**

**Represente, na base 2 e usando precisão simples, o número 15.125. Represente o mesmo valor na base 16.**

15125 / 2 -> 1

7562 / 2 -> 0

3781 / 2 -> 1

1890 / 2 -> 0

945 / 2 -> 1

472 / 2 -> 0

236 / 2 -> 0

118 / 2 -> 0

59 / 2 -> 1

29 / 2 -> 1

14 / 2 -> 0

7 / 2 -> 1

3 / 2 -> 1

1 / 2 -> 1

0

15125 = 11101100010101,0

Mantissa = 1,1101100010101 x 2^13

E = 127 + 13 = 140 = 1000 1100

S = 0

15125 em float = **01000110011011000101010000000000**