MINI QUIZ: BINARY CONVERSION OF IEEE FLOATING POINT

Identify the 3 components of this IEEE Floating Point Number and their values:

`01000010001010100000000000000000`

Using the three components, compute the value this represents:

For the largest fixed exponent, 11111111 == 255 - 127 = 128, what is the smallest (magnitude) incremental change that can be made to a number?

For the smallest (most negative) fixed exponent, what is the smallest (magnitude) incremental change that can be made to a number?

What does this imply about the precision of IEEE Floating Point values?