## **Decimal To Floating Point Official**

<b>Due</b> May 1 at 11:59pm	Points 60	Questions 3	Available Apr 24 at 6pm - May 5 at 11:59pm 11 days
Time Limit None			

## Instructions

Do the online quiz named <u>Decimal To Floating Point Practice</u> first so you can see how each answer is formatted and be sure to follow the format on the Decimal To Floating Point Official online quiz.

Some formatting details:

- · certain answers are in binary, others in decimal, and the final answer in hex
- · put hex letters in lowercase
- no radix specifiers for any answers
- · negative sign for only for negative unbiased exponent.
- · trailing zeros are never shown

A IEEE754 converter can be used to check your answers:

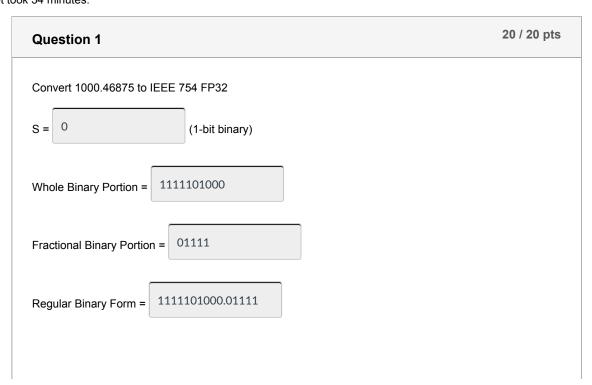
https://www.h-schmidt.net/FloatConverter/IEEE754.html

## **Attempt History**

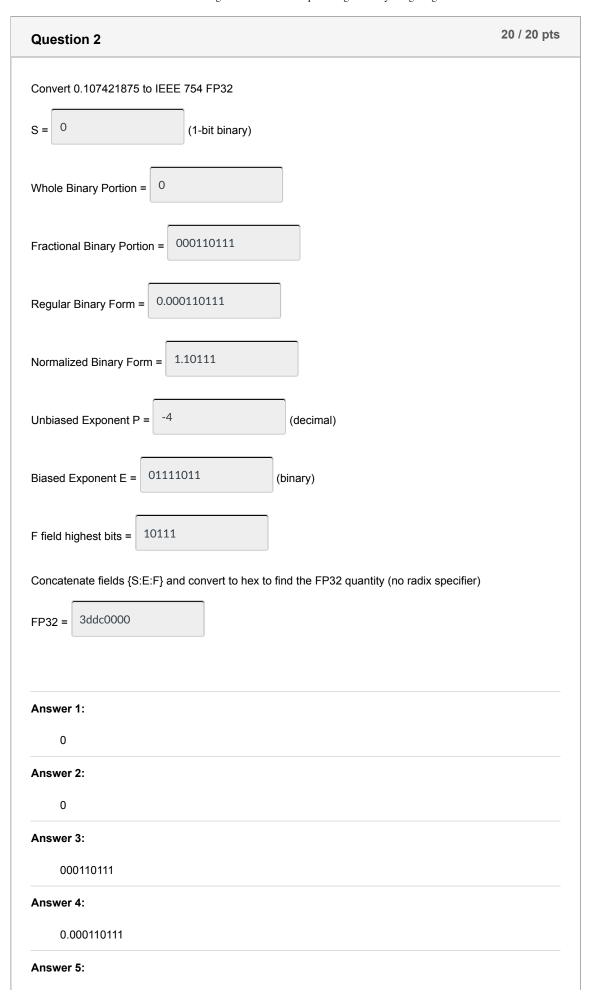
	Attempt	Time	Score
LATEST	Attempt 1	34 minutes	57.78 out of 60

▲ Correct answers will be available on May 6 at 12am.

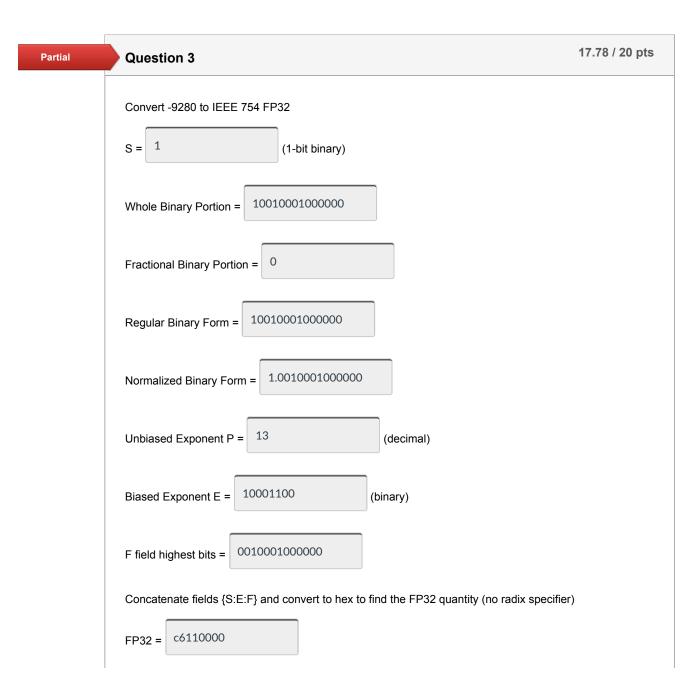
Score for this quiz: **57.78** out of 60 Submitted Apr 24 at 10:16pm This attempt took 34 minutes.



Normalized Binary Form = 1.11110100001111
Unbiased Exponent P = 9 (decimal)
Biased Exponent E = 10001000 (binary)
F field highest bits = 11110100001111
Concatenate fields {S:E:F} and convert to hex to find the FP32 quantity (no radix specifier)  FP32 = 447a1e00
Answer 1:
0
Answer 2:
1111101000
Answer 3:
01111
Answer 4:
1111101000.01111
Answer 5:
1.11110100001111
Answer 6:
9
Answer 7:
10001000
Answer 8:
11110100001111
Answer 9:
447a1e00



1.10111			
Answer 6:			
-4			
Answer 7:			
01111011			
Answer 8:			
10111			
Answer 9:			
3ddc0000			



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Answer 1:	
1	
Answer 2:	
10010001000000	
Answer 3:	
0	
Answer 4:	
10010001000000	
Answer 5:	
1.0010001000000	
Answer 6:	
13	
Answer 7:	
10001100	
Answer 8:	
0010001000000	
Answer 9:	
c6110000	

Quiz Score: **57.78** out of 60