Tests & Quizzes

Quiz 02

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Part 1 of 13 / 1.0 Points

Question 1 of 13 1.0 Points

Click to see additional instructions

The maximum number of possible values that can be encoded in 11 bits is ✖ 2047 .
Do not use any character other than digits.

Answer Key: 2048

Part 2 of 13 / 2.0 Points

Question 2 of 13 2.0 Points

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The range of possible unsigned values that can be represented in 6 bits is from ✔ 0 to ✔ 63 .
Do not use any character other than digits.

Answer Key: 0, 63

Part 3 of 13 / 1.0 Points

Question 3 of 13 1.0 Points

Click to see additional instructions
What is the minimum number of bits that are needed to represent 2050 different values? ✔ 12

Answer Key: 12

Part 4 of 13 / 2.5 Points

Question 4 of 13 2.5 Points

Click to see additional instructions

What is the unsigned decimal equivalent of the following ***unsigned*** *binary* integer value?

1110110 ✔ 118

Answer Key: 118

Part 5 of 13 / 2.5 Points

Question 5 of 13 2.5 Points

Click to see additional instructions

What is the unsigned *binary* equivalent of the following ***unsigned*** decimal integer value?

85 ✔ 1010101

Answer Key: 1010101

Part 6 of 13 / 2.5 Points

Question 6 of 13 2.5 Points

Click to see additional instructions

What is the unsigned decimal equivalent of the following ***unsigned*** *binary* value?

1011.11 ✔ 11.75

Answer Key: 11.75

Part 7 of 13 / 2.5 Points

Question 7 of 13 2.5 Points

Click to see additional instructions

What is the unsigned *binary* equivalent (with 3 digits after the radix point, truncated) of the following ***unsigned*** decimal number?

18.625 ✔ 10010.101

Answer Key: 10010.101

Part 8 of 13 / 1.0 Points

Question 8 of 13 1.0 Points

Click to see additional instructions

In 9-bit sign-and-magnitude representation, the total number of zero value that can be represented is ✔ 2

Answer Key: 2

Part 9 of 13 / 1.0 Points

Question 9 of 13 1.0 Points

Click to see additional instructions

In 9-bit 2's complement representation, the total number of zero value that can be represented is ✔ 1

Answer Key: 1

Part 10 of 13 / 1.0 Points

Question 10 of 13 1.0 Points

Click to see additional instructions

In 10-bit sign-and-magnitude representation, the total number of non-zero positive values that can be represented is ✔ 511

Answer Key: 511

Part 11 of 13 / 1.0 Points

Question 11 of 13 1.0 Points

Click to see additional instructions

In 15-bit sign-and-magnitude representation, the total number of non-zero negative values that can be represented is ✔ 16383

Answer Key: 16383

Part 12 of 13 / 1.0 Points

Question 12 of 13 1.0 Points

Click to see additional instructions

In 10-bit word 2's complement representation, the total number of non-zero positive values that can be represented is ✔ 511

Answer Key: 511

Part 13 of 13 / 1.0 Points

Question 13 of 13 1.0 Points

Click to see additional instructions

In 9-bit word 2's complement representation, the total number of non-zero negative values that can be represented is ✔ 256

Answer Key: 256