Chapter 1 - 1.3 Section Review

Name: Chester Austin Date: February 2, 2019 Description: Written assignment for Chapter 1 - 1.3 Section Review Directions:

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Do 10 of the review exercises.
This is a minimum number, you can do more.
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Question 1

Q: Explain the term `Least Significant Bit` (`LSB`).

A: The `Least Significant Bit` is usually the furthest right bit.

Question 2

Q: Explain the term `Most Significant Bit` (`MSB`).

A: The `Most Significant Bit` is ustually the furthest left bit that is not preceeded by `0`s.

Question 3

Q: What is the decimal representation of each of the following unsigned binary integers? a. `11111000` b. `11001010` c. `11110000`

A: a. 248 b. 202 c. 240

Question 4

Q: What is the decimal representation of each of the following unsigned binary integers? a. `00110101` b. `10010110` c. `11001100`

A: a. 53 b. 150 c. 204

Question 5

Q: What is the sum of each pair of binary integers? a. `00001111 + 00000010` b. `11010101 + 01101011` c. `00001111 + 00001111`

A: a. `0000010001` --> 17 b. `0101000000` --> 320 c. `0000011110` --> 30

Question 6

Q: What is the sum of each pair of binary integers? a. `10101111 + 11011011` b. `10010111 + 11111111` c. `01110101 + 10101100`

A: a. `110001010` --> 394 b. `110010110` --> 406 c. `100100001` --> 289

Question 7

Q: How many bytes are contained in each of the following data types? a. word b. doubleword c. quadword

A: a. 2 b. 4 c. 8

Question 8

Q: How many bits are contained in each of the following data types? a. word b. doubleword c. quadword

A: a. 16 b. 32 c. 64

Question 9

Q: What is the minimum number of binary bits needed to represent each of the following unsigned decimal integers? a. 65 b. 256 c. 32768

A: a. 7 b. 9 c. 12

Question 10

Q: What is the minimum number of binary bits needed to represent each of the following unsigned decimal integers? a. 4095 b. 65534 c. 2134657

A: a. 12 b. 12 c. 22