



on Bits and Bit Patterns

Instructions: For each question, choose the single best answer. Make your choice by clicking on its button. You can change your answers at any time. When the quiz is graded, the correct answers will appear in the box after each question.

1. How many patterns can be formed with a single bit?

- ☐ A. 1
- ☒ B. 2
- ☐ C. 4
- ☐ D. 8

B

2. How many patterns can be formed with three bits?

- ☐ A. 1
- ☐ B. 3
- ☒ C. 8
- ☐ D. 12

C

3. How many patterns can be formed from N bits?

- ☐ A. N
- ☐ B. N^2

- ☒ C. 2^N
- ☐ D. $2*N$

C

4. What is $2^4 * 2^3$?

- ☐ A. 8^2
- ☐ B. 2^6
- ☒ C. 2^7
- ☐ D. 2^{12}

C

5. How many bits are in a **nibble**?

- ☐ A. 2
- ☒ B. 4
- ☐ C. 8
- ☐ D. 16

B

6. What is the name for the bit pattern 0000 0010 ?

- ☐ A. 0x0002
- ☒ B. 0x02
- ☐ C. 0xA0
- ☐ D. 0x201

B

7. What is the name for the bit pattern 101010?

- ☐ A. 0xA2
- ☐ B. 0x222
- ☐ C. This pattern can not be named.
- ☒ D. 0x2A

8. Say that you read that a particular computer "uses hexadecimal". What is being described?

- ☐ A. ...the fundamental hardware of the processor chip.
- ☒ B. ...a convention used in written documentation of the computer.
- ☐ C. ...the type of arithmetic carried out by the computer.
- ☐ D. ...the type of signals used on the computer's bus.

9. What is the name for the convention where bits are named in groups of three?

- ☐ A. Trinary
- ☐ B. Sextuple
- ☐ C. Tridecimal
- ☒ D. Octal

10. How many bytes are in a kilobyte?

- ☐ A. 8
- ☐ B. 1000
- ☒ C. 1024
- ☐ D. 4068

The number you got right:

Percent Correct:

Letter Grade:



If you have returned here from another page, or have re-loaded this page, you will need to click again on each of your choices for the grading program to work correctly. You may want to press the SHIFT KEY while clicking to clear the old answers.