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How to Use Jade

BINARY INTEGERS PART I

5:03 / 5:05 1.0x

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BINARY INTEGERS PART II

Help

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1. CHECK YOUR UNDERSTANDING (1/1 point)

Which of the following is the binary equivalent to the decimal number 5?

- ○ 011
- ○ 100
- ● 0101 ✔
- ○ 0110

EXPLANATION

$2^2 + 2^0 = 4 + 1 = 5$ OR $0*2^3 + 1*2^2 + 0*2^1 + 1*2^0 = 0 + 4 + 0 + 1 = 5$.

| Final Check | **Save** | Hide Answer | *You have used 1 of 2 submissions*

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2. CHECK YOUR UNDERSTANDING

Consider the unsigned binary number 10011.

---

2 A. CHECK YOUR UNDERSTANDING (1/1 point)

What is the weight of the leftmost position?

○ 8

◉ 16 ✔

○ 32

○ 64

EXPLANATION

The leftmost bit is in the 4th position, so has weight $2^4 = 16$.

[Hide Answer]   *You have used 2 of 2 submissions*

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2 B. CHECK YOUR UNDERSTANDING (1/1 point)

What is the decimal value of the number?

○ 18

◉ 19 ✔

○ 22

○ 38

EXPLANATION

$1*2^4 + 0*2^3 + 0*2^2 + 1*2^1 + 1*2^0 = 16 + 0 + 0 + 2 + 1 = 19$.

[Final Check] [**Save**] [Hide Answer]   *You have used 1 of 2 submissions*

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3. CHECK YOUR UNDERSTANDING (1/1 point)

What is the result of adding the unsigned binary numbers 1011 and 0011?

○ 0100

○ 0110

○ 1100

◉ 1110 ✔

EXPLANATION

```
    11
  1011
+ 0011
  1110
```

[Final Check] [**Save**] [Hide Answer]   *You have used 1 of 2 submissions*   03/26/2015 09:59 AM

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