

**Solution**

$$101_2 = (1 \times 2^2) + (0 \times 2^1) + (1 \times 2^0)$$

$$101_2 = 4 + 0 + 1$$

$$101_2 = 5$$

## 7.R.1 Exercises

### Concept Check

**True/False.** Determine whether each statement is true or false. If a statement is false, explain how it can be changed so the statement will be true. (**Note:** There may be more than one acceptable change.)

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1. In the number 21,057, the “1” represents 1000.
  
  
  
  
  
  
  
  
  
  
2. In the number 17,536, the number in the tens place is 1.

### Practice

3. Given the number 284,065 which digit indicates the number of
  - a. tens?
  - b. ten thousands?
  - c. hundreds?
  
  
  
  
  
  
  
  
  
  
4. For the number 309,472 state the place value of
  - a. the digit 9.
  - b. the digit 4.
  - c. the digit 7.

5. Name the place value of each nonzero digit in the following number: 24,608.
  
6. Name the place value of each nonzero digit in the following number: 2,403,189,500.

### **Writing & Thinking**

7. How are natural numbers and whole numbers different and how are they the same?