

The Number Systems and the  
Real Number Line

1. Write each set

A is the set of natural numbers less  
than 7

2. Write each set

A is the set of whole numbers less  
than 4

3. Write each set

C is the set of integers between -2  
and 3 including -2 and 3

4. List the elements in the set

$$\left\{ -3, -2.1, 0, \frac{1}{2}, 0.\bar{3}, 5, 1.202002000\dots \right\}$$

natural numbers

5. List the elements in the set

$$\left\{ -3, -2.1, 0, \frac{1}{2}, 0.\bar{3}, 5, 1.202002000\dots \right\}$$

whole numbers

6. List the elements in the set

$$\left\{-3, -2.1, 0, \frac{1}{2}, 0.\bar{3}, 5, 1.202002000\dots\right\}$$

integers

7. List the elements in the set

$$\left\{-3, -2.1, 0, \frac{1}{2}, 0.\bar{3}, 5, 1.202002000\dots\right\}$$

rational numbers

8. List the elements in the set

$$\left\{-3, -2.1, 0, \frac{1}{2}, 0.\bar{3}, 5, 1.202002000\dots\right\}$$

irrational numbers

9. List the elements in the set

$$\left\{-3, -2.1, 0, \frac{1}{2}, 0.\bar{3}, 5, 1.202002000\dots\right\}$$

real numbers

10. Plot the points in each set on a  
real

$$\left\{-2, 0, \frac{1}{2}, 5.2\right\}$$

11. Determine whether the  
statement is true or false

$$-3 < -7$$

12. Determine whether the statement is true or false

$$-1 \geq -8$$

13. Replace the ? with the correct symbol:  $>$ ,  $<$ ,  $=$

$$-9 ? -2$$

14. Replace the ? with the correct symbol:  $>$ ,  $<$ ,  $=$

$$\frac{2}{5} ? \frac{1}{3}$$

15. Evaluate each expression

$$|7|$$

16. Evaluate each expression

$$\left| \frac{-2}{3} \right|$$