

Name: _____

Date: _____

1. An equation is shown.

$$x \div 4 = 7$$

Which value for x makes the equation true?

- A. 28 B. 17 C. 11

2. An equation is shown below.

$$1.25c = 250$$

What value of c makes the equation true?

- A. 200 B. 248.75 C. 251.25 D. 312

3. Solve for k .

$$k - 9 = 36$$

- A. $k = -4$ B. $k = 4$ C. $k = 27$ D. $k = 45$

4. Derek solved the equation $48 - d = 6$ to find out how many dollars, d , he spent. How many dollars did Derek spend?

- A. \$8 B. \$42 C. \$54 D. \$288

5. A coyote runs at a top speed of 43 miles per hour. An antelope runs at a top speed of 61 miles per hour. The equation below shows the relationship between the coyote's top speed and the antelope's top speed.

$$43 + x = 61$$

How much faster in miles per hour (x) does the antelope run than the coyote?

- A. 18 B. 61 C. 52 D. 104

6. Which operation should be used to solve $3x = 36$ for x ?

- A. add 3 to both sides B. subtract 3 from both sides
C. divide both sides by 3 D. multiply both sides by 3

7. What is the value of x in the equation $32x = 512$?

- A. 16 B. 480 C. 544 D. 16,384

8. Dave uses the equation $15m = 165$ to calculate the amount of money (m) he earned during each hour of work. Which step should Dave use to solve the equation for m ?

- A. add 15 to both sides
B. subtract 15 from both sides
C. multiply both sides by 15
D. divide both sides by 15

9. A go-cart has a maximum weight limit of 240 pounds. Which inequality correctly represents this weight limit, w ?

- A. $w \leq 240$ pounds B. $w < 240$ pounds
 C. $w \geq 240$ pounds D. $w > 240$ pounds

10. Which of the following is an example of an inequality?

- A. $3n - 6$ B. $4n > 9$ C. $2 = n - 1$ D. $5 + 0 = 5$

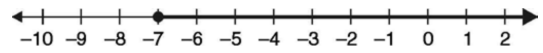
11. What is the solution to the inequality $x - 5 > 14$?

- A. $x > 9$ B. $x > 19$ C. $x < 9$ D. $x < 19$

12. Jason is planning to go to a concert. He has \$25.00. A ticket costs \$11.75. Which inequality represents the amount of money Jason can spend on refreshments?

- A. $x + 11.75 \leq 25$ B. $x - 11.75 \leq 25$
 C. $x + 11.75 \geq 25$ D. $x - 11.75 \geq 25$

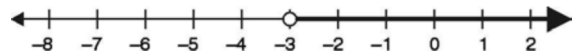
13. Use the graph below to answer the question that follows.



This graph is the solution set for which inequality?

- A. $x - 14 > 7$ B. $x - 7 \geq 14$
 C. $2x \geq -14$ D. $14x \geq -2$

14. Use the line graph below to answer the question that follows.



What is the solution set of the graph above?

- A. $x < -3$ B. $x \leq -3$ C. $x > -3$ D. $x^3 - 3$

15. Which graph represents $x \geq 3$?

- A.
 B.
 C.
 D.