1.

A(n) _____is a mathematical sentence in which the two sides are not equal and are separated with the symbols $<$, $>$, $\leq$ or $\geq$.

    a. Equation

    b. Equality

    c. Inequality

    d. Expression

Answer:

2.
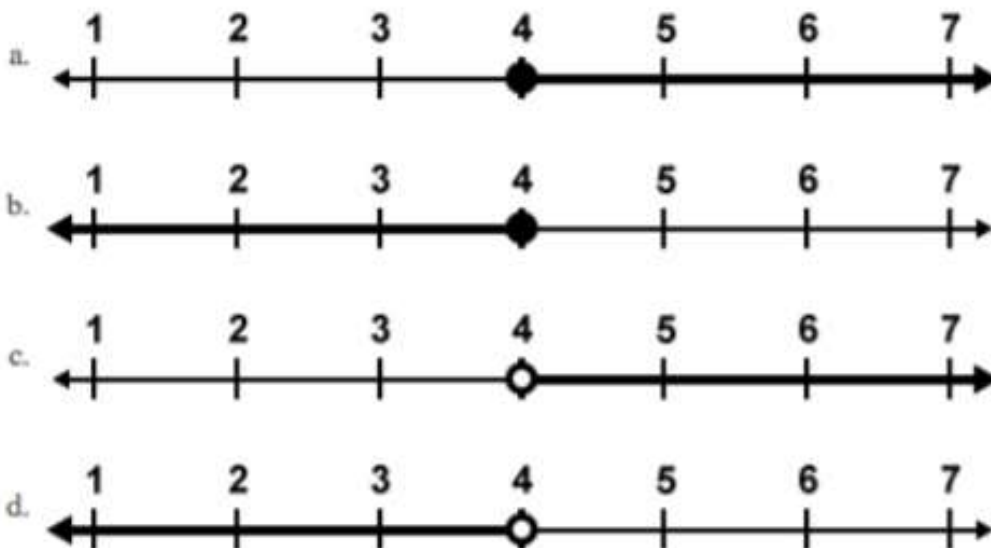
Which shows the inequality for numbers greater than 80?

    a. $n > 80$

    b. $n \geq 80$

    c. $n < 80$

    d. $n \leq 80$

Answer:

3.

Which number line best shows the inequality below?
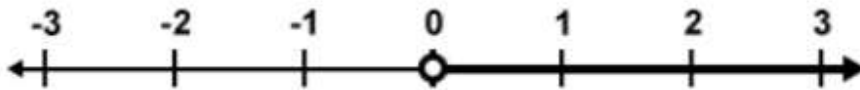
$x < 4$

Answer:

4.

Which phrase best describes the number line?

    a. any number less than zero
    b. any number greater than zero
    c. any number less than or equal to zero
    d. any number greater than or equal to zero

Answer:

5.

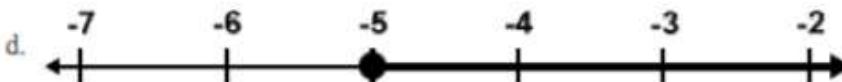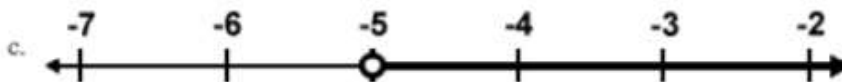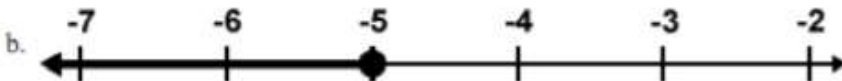Which value from the number set {3, 7, 9, 12} makes the inequality $q < 5$ true?
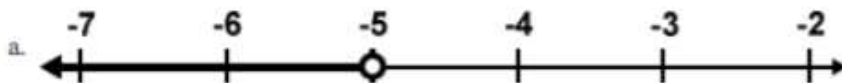
    a. 3
    b. 7
    c. 9
    d. 12

Answer:

6.

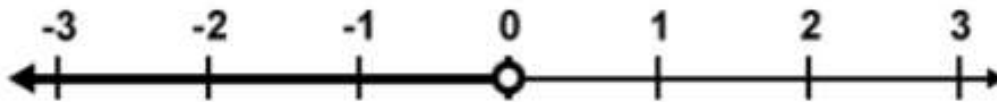Select the number line that best represents the following statement.

any number less than negative five

Answer:

7.

Which phrase best describes the number line?

    a. any number less than zero
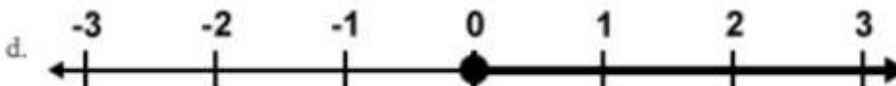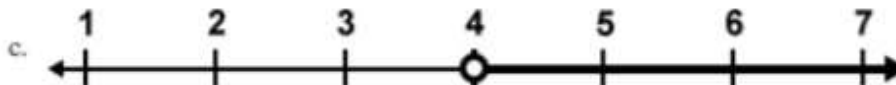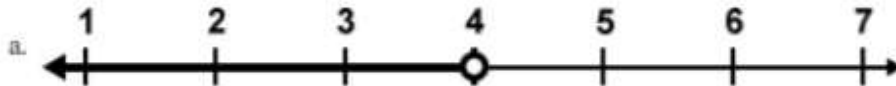
    b. any number greater than zero

    c. any number less than or equal to zero

    d. any number greater than or equal to zero

Answer:

8.

The highest temperature reached on Monday was 4°C. Which number line could represent this situation?

Answer:

9.

Which value would make the inequality false?

$a \geq 18$

    a. 33

    b. 17

    c. 21

    d. 19

Answer:

10.

Iman wrote the inequality below to represent the money, x, that she has. Which situation is correctly represented by the inequality?

$x > 12$

    a. Iman has at least $12.

    b. Iman has more than $12.

    c. Iman has less than $12.

    d. Iman has no more than $12.

Answer:

11.

Which number line best shows the inequality below?

$x > -5$
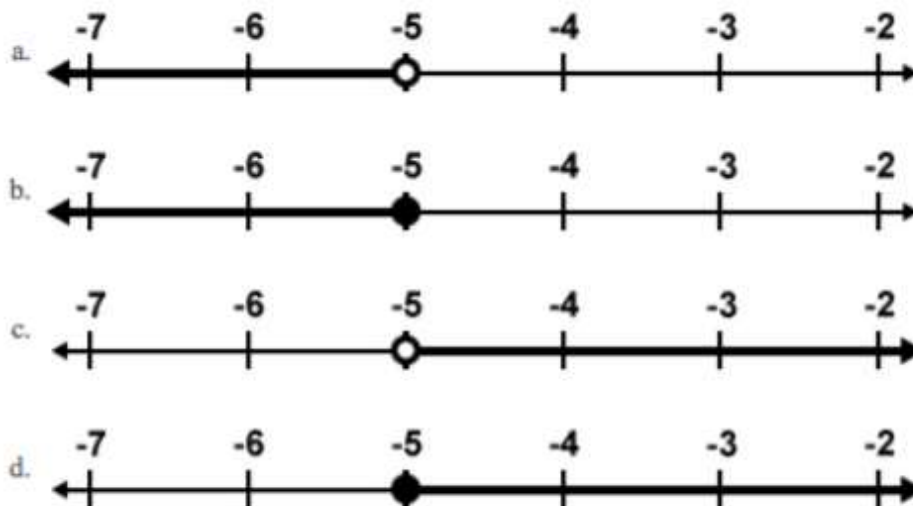
Answer:

12.

For a spacecraft to be launched from Earth into orbit, it must move faster than 25,000 miles per hour. Which could be an inequality that represents v, the velocity in miles per hour, of a spacecraft launching into orbit?

    a. $v < 25,000$

    b. $v > 25,000$

    c. $v \le 25,000$

    d. $v \ge 25,000$

Answer:

13.

Destiny wanted the temperature to be no more than 75 degrees. Which inequality shows that?

    a. $t < 75$

    b. $t \leq 75$

    c. $t \geq 75$

    d. $t = 75$

Answer:

14.

Select the number(s) that make the inequality true. You may select one or more answers.

$t < 23$

    a. 21

    b. 22

    c. 23

    d. 24

Answer:

15.

Let x represent any number in the set $\{3, 6, 7, 9\}$.
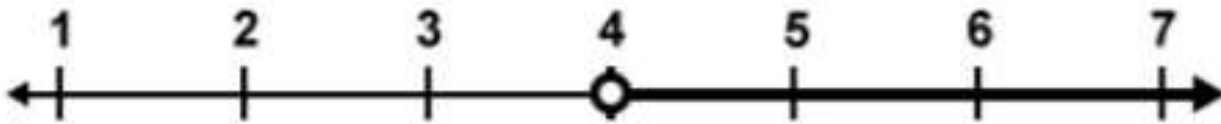
Which inequality is true for all values of x?

    a. $x > 5$

    b. $x < 5$

    c. $x > 10$

    d. $x < 10$

Answer:

16.

The solution of which inequality is shown by the number line?

1   2   3   4   5   6   7
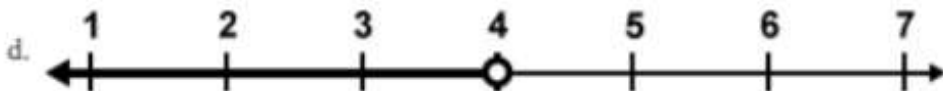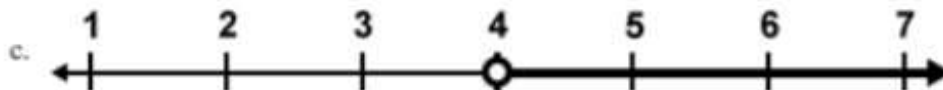
a. $x \geq 4$

b. $x \leq 4$

c. $x > 4$

d. $x < 4$

Answer:

17.

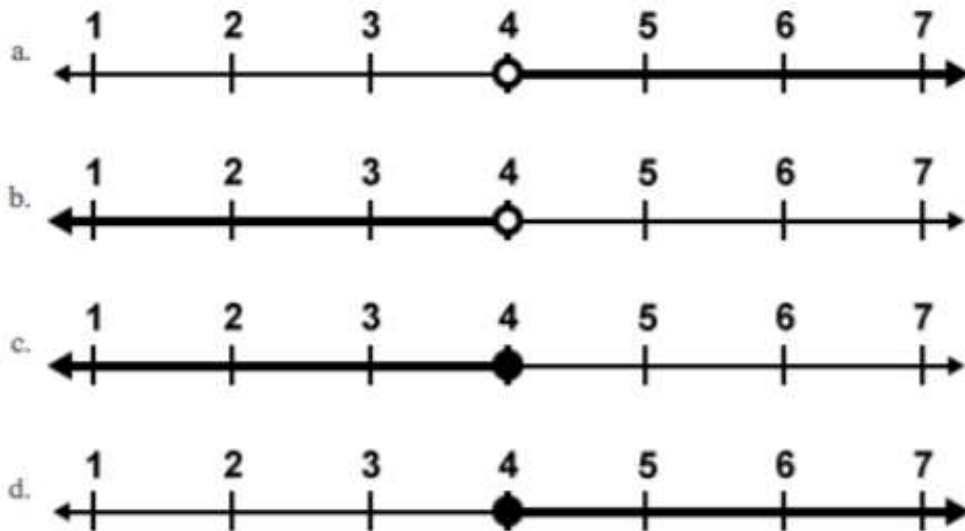Mike needs to earn at least $4 to buy a new deck of cards. Which number line could represent this situation?

a.

1   2   3   4   5   6   7

b.

1   2   3   4   5   6   7

c.

1   2   3   4   5   6   7

d.

1   2   3   4   5   6   7

Answer:

18.

Which number line best shows the inequality below?

$x \le 4$

a.

| 1 | 2 | 3 | 4 | 5 | 6 | 7 |

b.

| 1 | 2 | 3 | 4 | 5 | 6 | 7 |

c.

| 1 | 2 | 3 | 4 | 5 | 6 | 7 |

d.

| 1 | 2 | 3 | 4 | 5 | 6 | 7 |

Answer:

19.

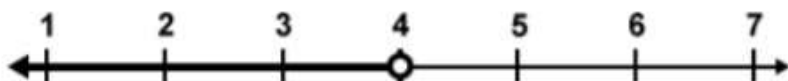Thomas has at least $20 to spend this week. Which statement reflects that?

a. $x < 20$

b. $x > 20$

c. $x \le 20$

d. $x \ge 20$

Answer:

20.

The solution of which inequality is shown by the number line?

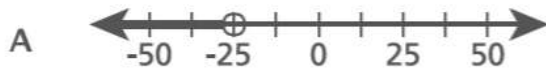| 1 | 2 | 3 | 4 | 5 | 6 | 7 |

a. $x \ge 4$

b. $x > 4$

c. $x < 4$

d. $x \le 4$

Answer:

The library has at least 5,000 books. Which inequality represents the number of books, b, at the library?

A $b > 5,000$

B $b \geq 5,000$

C $b < 5,000$

D $b \leq 5,000$

Answer:

Which number line shows a graph of the inequality $x > -25$?

A

-50 -25 0 25 50

C

-50 -25 0 25 50

B

-50 -25 0 25 50

D

-50 -25 0 25 50

Answer:

Which statement describes every number that is a solution to the inequality $6t > 48$?

A It has a value greater than 8.

B It has a value less than 8.

C It has a value equal to 8.

D Its value is 8 greater than 48.

Answer:

Which value or values for the variable c from the set below will make $5.6 + 0.4c \leq 6c$ true?

$$\{0,\ 0.875,\ 1,\ 2.5\}$$

A only 2.5

B 1 and 2.5

C 0.875, 1, and 2.5

D all values in the set

Answer:

George has $23 to spend on art supplies. He wants to buy markers, paper, and glue. If the total cost of the markers and paper is more than $14, which inequality represents the dollar amount, p, George can spend on glue?

A $p < 9$

B $p > 9$

C $p < 37$

D $p > 37$

Answer:

Guests must be at least $42\frac{1}{2}$ inches tall to go on an amusement park ride. Which inequality represents the heights of the guests allowed on the ride?

A $h \geq 42\frac{1}{2}$

B $h > 42\frac{1}{2}$

C $h \geq 43$

D $h > 43$

Answer: