

1

What value of t satisfies the equation below?

$$\frac{4}{3t} = 24$$

A $t = \frac{1}{18}$

B $t = \frac{1}{2}$

C $t = 2$

D $t = 18$

2.

In a game, the two players scored a total of 121 points. One player had 13 more points than the other player. How many points did the player with the fewer points score?

A 52

B 54

C 67

D 108

3.

Nancy determined that 48 out of the 108 students in tenth grade play a musical instrument. What fraction of the students plays a musical instrument?

A $\frac{8}{27}$

B $\frac{1}{3}$

C $\frac{4}{9}$

D $\frac{4}{5}$

4.

If $5x - 14 \geq 0$, what is the LEAST possible value of x ?

A $-\frac{14}{5}$

B $-\frac{5}{14}$

C $\frac{5}{14}$

D $\frac{14}{5}$

5.

In the equations below, a is the price, in dollars, of an adult ticket to a school play, and s is the price of a student ticket.

$$5a + 3s = 42$$

$$3a + s = 22$$

What is the price of an adult ticket to the play?

- A \$4
- B \$5
- C \$6
- D \$10

6.

If $C = \frac{5}{9}(F - 32)$, where C is the temperature in degrees Celsius and F is the temperature in degrees Fahrenheit, what is the value of C when $F = 86$?

- A 30
- B 32
- C 45
- D 54

7.

The stem-and-leaf plot below shows the heights of 17 students.

Height (in inches)	
5	9
6	0 1 2 2 4 5 6 7 8 8 8 9
7	0 1 2 2

Key: 5 | 9 represents 59 inches.

What is the mode of the heights?

- A 62 in.
- B 67 in.
- C 68 in.
- D 72 in.

8.

The line with equation $y = 10x - 2$ intersects the x -axis at the point $(a, 0)$.

What is the value of a ?

- A -2
- B $\frac{1}{5}$
- C 5
- D 10

9.

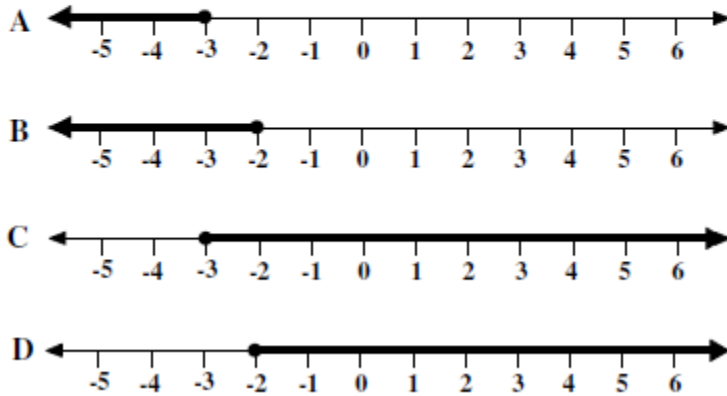
Which number equals $3\sqrt{56}$?

- A $6\sqrt{14}$
- B $12\sqrt{7}$
- C $15\sqrt{6}$
- D $8\sqrt{28}$

10.

Which graph shows the values of x that satisfy the inequality below?

$$2x \geq -6$$



BONUS

11.

The formula for finding the perimeter, P , of a rectangle with length l and width w is given.

$$P = 2l + 2w$$

Which formula shows how the length of a rectangle can be determined from the perimeter and the width?

- Ⓐ $l = \frac{P}{2} - 2w$
- Ⓑ $l = \frac{P-2w}{2}$
- Ⓒ $l = \frac{P}{2} + w$
- Ⓓ $l = \frac{P-2}{2w}$