



1

Christine sells real estate. She is paid 4% of the sale price of every house she sells. What is Christine paid for selling a house at the sale price of \$300,000?

- A) \$400
- B) \$1,200
- C) \$4,000
- D) \$12,000

2

For what value(s) of x is $(x + 4)(x - 5) = 0$ true?

- A) -4 and 5
- B) -4 only
- C) 4 and -5
- D) 4 only

3

Which of the following inequalities orders the numbers 0.2, 0.01, and $\frac{1}{7}$ from least to greatest?

- A) $0.2 < 0.01 < \frac{1}{7}$
- B) $0.01 < 0.2 < \frac{1}{7}$
- C) $0.01 < \frac{1}{7} < 0.2$
- D) $\frac{1}{7} < 0.01 < 0.2$

4

Given that $4x + 1 = 5$, what is the value of $(x + 1)^2$

- A) 1
- B) 2
- C) 4
- D) 16



5

What vector is the result of adding the vectors $\langle -1, 2 \rangle$, $\langle -2, -3 \rangle$, and $\langle 4, -2 \rangle$?

- A) $\langle 8, 12 \rangle$
- B) $\langle -1, 3 \rangle$
- C) $\langle 3, -3 \rangle$
- D) $\langle 1, -3 \rangle$

6

What value of x makes $\frac{4}{5}x + 3 = 19$

- A) $\frac{88}{5}$
- B) $\frac{64}{5}$
- C) 16
- D) 20

7

In Mountainview, the daily low temperatures, in degrees Fahrenheit ($^{\circ}\text{F}$), during the first week of January were 3, -12, 15, 30, 9, -2, and 6. To the nearest degree Fahrenheit, what was the mean daily low temperature for the week?

- A) 7°F
- B) 9°F
- C) 16°F
- D) 19°F

8

Assume that x , y , and z are real numbers. If $x > z$ and $(x+y) > (y+z)$, then what is true of z ?

- A) z must have the same sign as y
- B) z must be positive
- C) z must be positive
- D) z can be any real number



9

What is the slope of the line given by the equation $3x+5y=-4$

- A) $\frac{3}{5}$
- B) $\frac{5}{3}$
- C) $-\frac{3}{5}$
- D) $-\frac{5}{3}$

10

One leg of a right triangle is 5 meters long and the other leg is 10 meters long. How many meters long is the hypotenuse?

- A) $5\sqrt{5}$
- B) $\sqrt{50}$
- C) $10\sqrt{5}$
- D) $5\sqrt{3}$

Answer Key

| Calculator Off | |
|----------------|---|
| 1 | D |
| 2 | A |
| 3 | C |
| 4 | C |

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| Calculator On | |
|---------------|---|
| 5 | D |
| 6 | D |
| 7 | B |
| 8 | D |
| 9 | C |
| 10 | A |