

Quick Quiz 11132019

Question 1.

What are the zeros of $f(x) = (x + 5)(x - 4)$?

- A** 4 and 5
- B** -4 and 5
- C** 4 and -5
- D** -4 and -5
- E** none of the above

Use your graphing software to check your answer.

Question 2

Look at the equation below.

$$6 - 2y = 2(3 - y)$$

Which of these properties is shown by the equation?

- A** identity property
- B** associative property
- C** distributive property
- D** commutative property
- E** transitive property

Question 3. Use your graphing software to check your answer.

What is the vertex of the parabola
 $y = (x + 3)^2 + 1$?

- A $(-3, -1)$
- B $(-3, 1)$
- C $(-1, -3)$
- D $(-1, 3)$
- E none of the above

Question 4.

The statement “A number multiplied by itself is the number added to itself” is represented by which of these equations?

- A $n = 2n$
- B $n = n + 1$
- C $n^2 = 2n$
- D $2n = n + 1$
- E none of the above

Question 5.

Using a graphing calculator or coordinate grids, do the graphs of $f(x) = x + 2$ and $g(x) = x^2 - 2x - 4$ intersect?

- A** No, they do not intersect.
- B** Yes, they intersect at one point.
- C** Yes, they intersect at two points.
- D** Yes, they intersect at three points.
- E** Not enough information is given to determine whether the graphs intersect.

Question 8. Use your graphing software to check your answer.

The range of the function $f(x) = x^2 + 2x - 8$ is all real numbers

- (1) less than or equal to -9
- (2) greater than or equal to -9
- (3) less than or equal to -1
- (4) greater than or equal to -1

Question 9. Use your graphing software to check your answer.

The zeros of the function $f(x) = x^2 - 5x - 6$ are

- (1) -1 and 6
- (2) 1 and -6
- (3) 2 and -3
- (4) -2 and 3

Question 10. Use your graphing software to check your answer.

Which equation and ordered pair represent the correct vertex form and vertex for $j(x) = x^2 - 12x + 7$?

- (1) $j(x) = (x - 6)^2 + 43, (6, 43)$
- (2) $j(x) = (x - 6)^2 + 43, (-6, 43)$
- (3) $j(x) = (x - 6)^2 - 29, (6, -29)$
- (4) $j(x) = (x - 6)^2 - 29, (-6, -29)$

Bonus Question

Question 11

In a sequence, the first term is 4 and the common difference is 3. The fifth term of this sequence is

- (1) -11
- (2) -8
- (3) 16
- (4) 19