

**Algebra Review #19 SHOW HOW YOU SOLVED EACH PROBLEM**

1. Which algebraic expression could be represented by the statement below?

Three times the square of a number

- A  $3x^2$
- B  $3 + x^2$
- C  $(3x)^2$
- D  $2x^2$

2. If  $f(x) = 2x^3 - x^2 + 1$ , find  $f(-3)$ .

3. Tell whether the equation has one, none, or infinite solutions:

$$-x + 10 + 3 = -(x - 7)$$

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4. Which of the following is the slope formula?

A  $y = \frac{y_1 - y_2}{x_2 - x_1}$

B  $y = \frac{y_2 - y_1}{x_1 - x_2}$

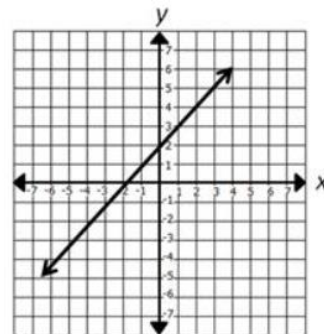
C  $y = \frac{y_2 - x_2}{y_1 - x_1}$

D  $y = \frac{y_2 - y_1}{x_2 - x_1}$

5. Solve the following equation:

$$5x - 1 = \frac{9x + 7}{2}$$

6. Observe the following graph.



Is the following graph a function? Why or why not?

What is the domain?

What is the range?

What is the slope?

7. What is the value of the following:

$$3\sqrt{12} \cdot 4\sqrt{3}$$

8. Simplify the radical.

$$\sqrt{2940x^4y^5z}$$

9.

If  $A = bc + us$ , which equation is solved for  $s$ ?

A  $s = \frac{bc}{A-u}$

B  $s = \frac{A-bc}{u}$

C  $s = \frac{A+bc}{u}$

D  $s = A - bc - u$

10. Solve for  $y$ .

$$y - 8x = 7$$