QUIZIZZ

Homework 8.4 *Three Problems Require Work*

13 Questions

NAME : _____

CLASS : _____

DATE : _____

1. Compare the function $y = 5x^2$ to the parent function $y = x^2$

☐ a) Wider   ☐ b) Narrower

2. Describe the transformation of $y = x^2 + 4$

☐ a) Shift 4 units UP   ☐ b) Shift 4 units DOWN

☐ c) Shift 4 units LEFT   ☐ d) Shift 4 units RIGHT

3. Describe the transformation of $y = (x - 4)^2$

☐ a) Shift 4 units UP   ☐ b) Shift 4 units DOWN

☐ c) Shift 4 units LEFT   ☐ d) Shift 4 units RIGHT

4. Describe the transformation of $y = -2x^2 - 5$

☐ a) Flipped and shifted 5 units down   ☐ b) Flipped, shifted 5 units down, and is narrower

☐ c) Flipped, shifted 5 units down, and is wider   ☐ d) Shifted 5 units down and is narrower
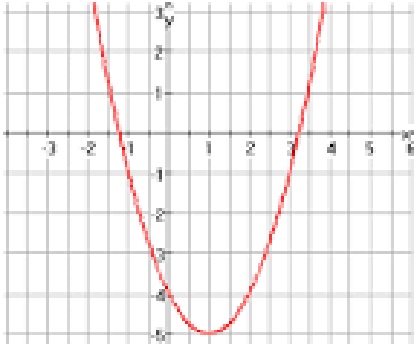
5. Describe the transformation of $y = (x + 7)^2 + 3$

☐ a) Moved 7 units right and 3 units up   ☐ b) Moved 7 units left and 3 units up

☐ c) Moved 7 units right and 3 units down   ☐ d) Moved 7 units left and 3 units down

6. Describe the transformation of $y = (1/3)(x - 3)^2 + 3$

☐ a) The parabola is narrow and moved 3 units right and 3 units up

☐ b) The parabola is narrow and moved 3 units left and 3 units up

☐ c) The parabola is wider and moved 3 units right and 3 units up

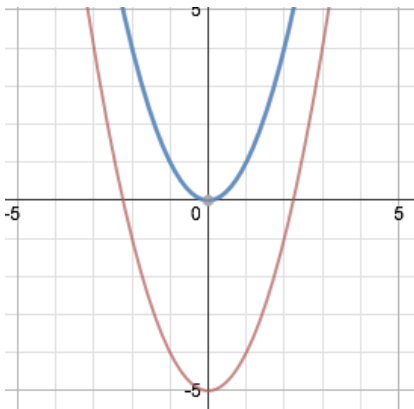☐ d) The parabola is wider and moved 3 units left and 3 units up

7.

What is the equation of this graph?

☐ a) $f(x) = (x - 5)^2 + 1$

☐ b) $f(x) = (x - 1)^2 - 5$

☐ c) $f(x) = (x + 1)^2 - 5$

☐ d) $f(x) = (x + 5)^2 + 1$

8. If given the equation $y = 3(x + 5)^2 - 4$, what is the vertex of the parabola?

☐ a) (5, -4)

☐ b) (-5, -4)

☐ c) (-15, -4)

☐ d) (15, -4)

9.

If the blue is $f(x)=x^2$, then the red must be

☐ a) $g(x)=x^2-5$

☐ b) $g(x)=x^2+5$

☐ c) $g(x)=(x-5)^2$

☐ d) $g(x)=(x+5)^2$

10. Use the quadratic formula to determine the two roots of the function: $Y = 3x^2 - 4x + 1$

☐ a) 4 1/3   ☐ b) 1

☐ c) 1/3   ☐ d) - 1/3

☐ e) -1

11. Use the quadratic formula to determine the two roots of the function:$2x^2 + 8x = 5$

☐ a) 10.55   ☐ b) -4.55

☐ c) 5.85   ☐ d) 0.55

☐ e) -2.5

12. Use the quadratic formula to determine the two roots of the function: $Y = 8x^2 - 4$

☐ a) 2.2   ☐ b) 0.7

☐ c) 3.1   ☐ d) -0.7

☐ e) -3.1

13. $3x^2 - 4x + 1$What is the equation for the axis of symmetry?

☐ a) x = -4   ☐ b) x = 2/3

☐ c) x = 8   ☐ d) x = 12

☐ e) x = 2