QUIZIZZ

NAME : _____

CLASS : _____

DATE : _____

Extra Credit Spring Break HW (formerly HW 8.2) due Mon 4/19

13 Questions

1. Mark all true statements given this function: $f(x) = 2(x - 2)^2 + 4$

☐ a) Parabola contains (0,4)   ☐ b) Vertex Form

☐ c) Factored Form   ☐ d) Parabola contains (2,4)

☐ e) Parabola contains (-2, 4)

2. Mark all true statements given this function: $g(x) = 2x^2 + 5x + 5$

☐ a) Standard Form   ☐ b) Vertex Form

☐ c) Parabola contains (0, 5)   ☐ d) Parabola contains (2,5)

☐ e) Parabola opens upward

3. Mark all true statements given this function: $k(x) = -(x - 2)(x + 4)$

☐ a) Factored form   ☐ b) Vertex form

☐ c) Contains (2,0) and (-4,0)   ☐ d) Contains (-2, 0) and (4, 0)

☐ e) Opens upward

4. Convert the function to factored form and identify the zeros of the function, $f(x) = x^2 + 2x - 8$

☐ a) (-2,0) (-4,0)   ☐ b) (-2,0) (4,0)

☐ c) (2,0) (-4,0)   ☐ d) (2,0) (4,0)

5.   Given the function in vertex form, identify all true statements: $y = -2(x - 3)^2 + 4$

☐ a) Contains (3,4)   ☐ b) Contains (-3, 4)

☐ c) Opens upward   ☐ d) Opens downward

☐ e) Contains (0,4)

6.   Given standard form of the function, identify all true statements: $y = -2x^2 + 4$

☐ a) Contains (-2, 4)   ☐ b) Contains (0, 4)

☐ c) Opens upward   ☐ d) Opens downward

7.   What is the vertex for the graph of the function? $y = -2(x - 7)^2$

☐ a) (7, 0)   ☐ b) (-2, 0)

☐ c) (-2, -7)   ☐ d) (2, -7)

8.   Given the vertex form of the function, which statements are true? $y = (x - 1)^2 + 9$
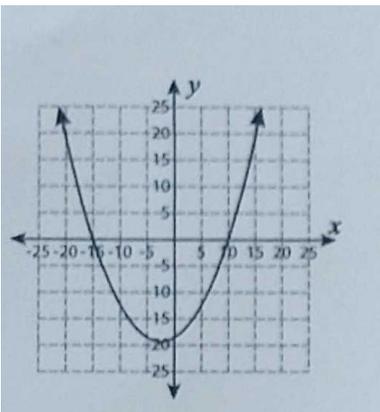
☐ a) The vertex is at (1, 9)   ☐ b) The vertex is at (1, -9)

☐ c) The axis of symmetry has the equation   ☐ d) The axis os symmetry has the equation
     x = 1   x = -1

☐ e) The vertex is at (-1, -9)

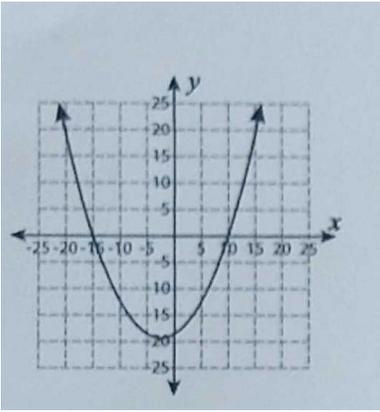9.   What are domain values for increase and decrease for this function?

☐ a) Increasing x < -20, Decreasing x > -20   ☐ b) Increasing x < -2.5, Decreasing x > -2.5

☐ c) Increasing x > -2.5, Decreasing x < -2.5 ☐ d) Increasing x > -20, Decreasing x < -20

10.

What is the range for the function shown and what is the equation for the axis of symmetry?
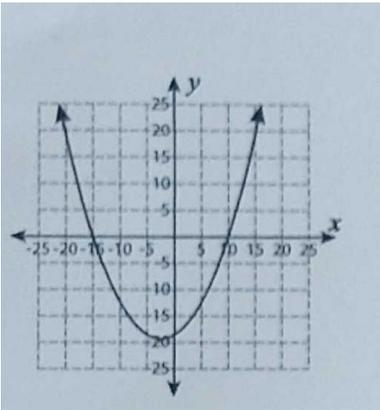
☐ a) $y \leq -20$

☐ b) $y \geq -20$

☐ c) Axis of symmetry is $y = -2.5$

☐ d) $y \geq -2.5$

☐ e) Axis of symmetry is $x = -2.5$

11.

What are the zeros for the function shown? {mark all that apply}

☐ a) (10,0)

☐ b) (0,10)

☐ c) (-15,0)

☐ d) (0,-10)

☐ e) (0,-18)

12. $f(x) = 3x^2 + 12x - 1$ Use algebra to determine the vertex point

☐ a) (2, 35)

☐ b) (-2, -37)

☐ c) (-2, -13)

☐ d) (2, 59)

13. $f(x) = -x^2 + 2x + 3$ Use algebra to determine the vertex point

☐ a) (1 , 4)

☐ b) (1 , 6)

☐ c) (-1, 2)

☐ d) (-1, 0)