Weeks 1-7 Review Name: _____

Quiz 1 Review

1. If $x = -5$, what is y?

$$r(x) = -5(x)^2 + 3$$

2. Determine the output values.

$$g(x) = 7x + 4$$

x	-3	0
y		

3. Determine the output values.

$$h(x) = 2(x - 4)(x + 2)$$

x	-3	4
y		

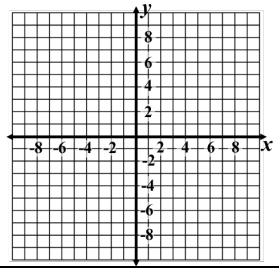
4. Determine the output values.

$$k(x) = 2(x - 3)^2 + 8$$

x	-5	0
y		

5. Graph the relation as a continuous function.

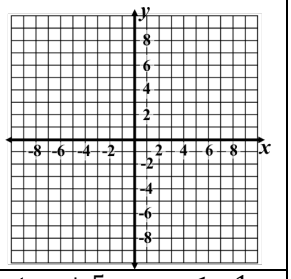
x	y
-2	6
-1	0
0	-2
1	0
2	6



6. Graph the equation using the x-values provided below.

$$m(x) = 2x + 6$$

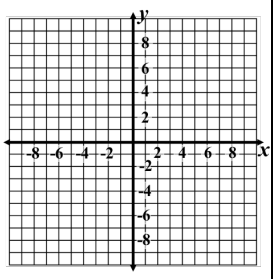
x	y
-5	
0	
1	



7. Graph the equation using the middle x provided below.

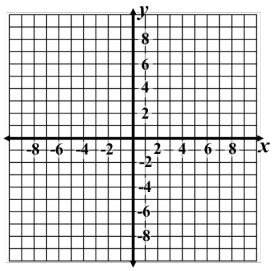
$$n(x) = x^2 - 4x - 5$$

x	y
2	

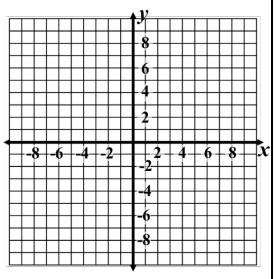


8. Graph.

$$f(x) = -2x - 5, \quad -4 < x < 2$$



9. Graph. $g(x) = \begin{cases} x + 5, & x \leq -1 \\ -2, & -1 < x \leq 3 \\ -4x + 20, & x > 3 \end{cases}$



8. For the domain $-5 < x \leq 7$, will the lower limit ($at\ x = -5$) be graphed as an open or closed point? How do you know?

Quiz 2 Review

11. Isolate and evaluate x.

$$14 = -3x + 5$$

12. Isolate and evaluate x.

$$0 = 4(x + 6)^2 - 100$$

13. Write the inverse equation.

$$y = 5x - 30$$

14. Write the inverse equation.

$$y = 5(x - 3)^2 - 180$$

15. Determine the axis of symmetry (the middle x).

$$f(x) = -4x^2 + 20x - 3$$

16. Determine the inverse of each point in the xy table.

x	y
-2	6
-1	0
0	-2
1	0
2	6

Quiz 3 Review

17. Write the given quadratic equation in **vertex form**.

$a = -5$ $\quad h = -1 \quad r_1 = 3$
$b = -10 \quad k = 80 \quad r_2 = -5$
$c = 75$

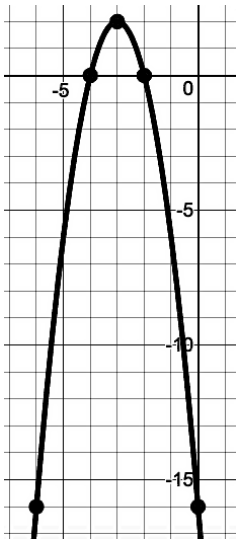
18. Write the given quadratic equation in **factored form**.

$a = -5$ $\quad h = -1 \quad r_1 = 3$
$b = -10 \quad k = 80 \quad r_2 = -5$
$c = 75$

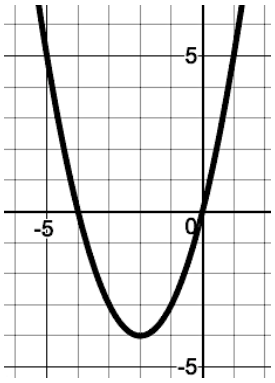
19. Determine the value of b, using the given information.

$a = 7$ $\quad h = 3 \quad r_1 = 2$
$b = ? \quad k = -7 \quad r_2 = 4$
$c = 56$

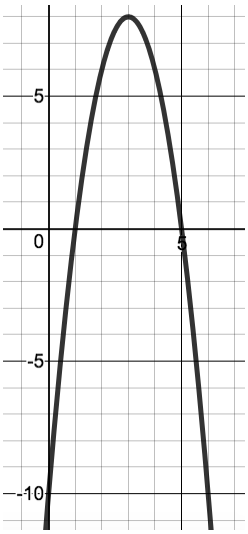
20. Write the quadratic equation in **standard form.**



21. Write the quadratic equation in **factored form.**



22. Write the quadratic equation in **vertex form.**



Example Quiz 4

The first 5 questions will be basic skills: Add, Subtract, Multiply, Divide, Square
The next 4 questions will be review questions. Anything from the above review is fair game (as is anything else from this year).

23. Simplify. $(m^{-4})^{\frac{1}{2}}$

24.
a. If $x^3 = 216$, then $x = 216^{?}$

b. What value makes $x^3 = 216$?

25. Multiply. $(x - 6)(x + 8)$

26. Multiply. $(3x + 7)(x - 9)$

27. Multiply. $(x + 8)(x - 8)$

28. Expand vertex form to convert to standard form.

$2(x + 7)^2 + 5$