2.1 Quadratic Parent Function CYU DAY TWO

☐ Use when you get it right all by yourself

S Use when you did it all by yourself, but made a silly mistake **H** Use when you could do it alone with a little help from teacher or peer

G Use when you completed the problem in a group

X Use when a question was attempted but wrong (get help)

NUse when a question was not even attempted

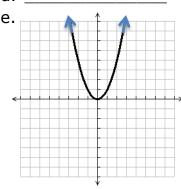
CONCEPTS	BASIC	INTERMEDIATE	ADVANCED
Vertex	1 - 12		
Horizontal/Vertical Stretch/Compression		1 - 12	
Translation left, right, up, down	1 - 12	1 - 12	
Graphing Quadratics	1 - 12		
Using the Calculator	1 - 12		
Domain/Range in interval notation	1 - 12	1 - 12	

Directions: For each quadratic equation, describe the following changes...

- a. Vertex new location?
- b. Does the parabola get <u>Stretched</u> or <u>Compressed</u>? <u>Horizontal</u> or <u>Vertical</u>? Factor?
- c. Does the parabola shift left or shift right? How many units?
- d. Does the parabola shift up or shift down? How many units?
- e. Sketch the given equation on the same graph as the parent function. Label.
- f. Domain and Range in interval notation.

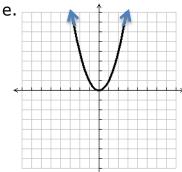
1.
$$y = \frac{1}{2}(x+1)^2 - 4$$

- a. _____
- b. _____
- C. _____
- d.



2.
$$y = -3(x + 2)^2 + 8$$

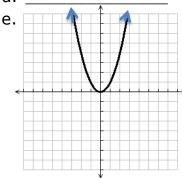
- a. _____
- D. _____
- d
- d. _____



f. _____

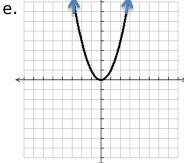
- $y = \frac{1}{6}(x + 3)^2 + 3$ 3.

 - b. _____
 - C. _____
 - d. ___



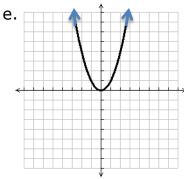
- - a. _____ b. _____

 - d.



f. ______ 7.
$$y = -2(x - 2)^2 - 5$$

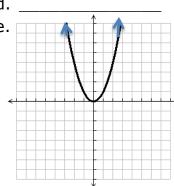
- a. _____
- C. _____
- d.



f. _____

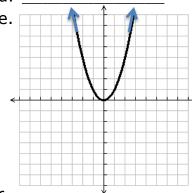
4.
$$y = 7(x + 4)^2 + 1$$

- b. _____
- C. _____
- d.

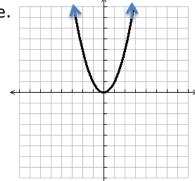


f. ______6.
$$y = -\frac{1}{8}(x - 4)^2 + 4$$

- b. _____ C. _____



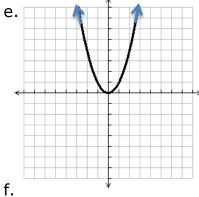
- f. 8. $y = 4(x-1)^2 - 3$
 - a. _____ b. _____
 - C. _____
 - d.



f.

- $y = (x + 1)^2 4$ 9.

 - C. _____
 - d.



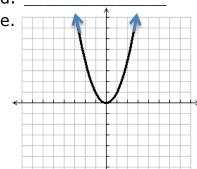
- $y = (x 4)^2 + 5.5$ 11.

 - b. _____
 - C.

f.

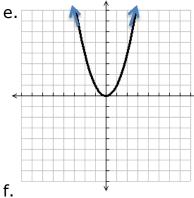
- 10. $y = -(x 2)^2 + 1$

 - b. _____
 - C. _____
 - d.



- f.
- 12. $y = -(x + 2)^2 8$

 - b. _____
 - C. _____



CYU Reflection: How far can you go: basic, intermediate, or advanced?

Rate your mastery level!

How confident are you with the skills this CYU covered? Circle the score you would give yourself.

