Name **Key**   Date _____ Pd ____

8.1 – 8.3 Review DAY ONE CYU

CONCEPTS	BASIC	INTERMEDIATE	ADVANCED
Vocabulary terms	1 - 6		
Synthetic Substitution	7	13, 14	15
Transformations		8	
Writing equations in function notation	9	11	
Function notation coordinates	10		12
Domain & Range	16, 17		
Graphing quadratics	18		

Fill in each blank with one of the words or phrases from this chapter's vocabulary list.

1. ___**Parallel**___ lines have the same slope and different y-intercepts.

2. __**Slope-Intercept**__ form of a linear equation in two variables is y = mx + b.

3. A(n) ___**function**___ is a relation in which each first component in the ordered pairs corresponds to exactly one second component.

4. In the equation y = 4x – 2, the coefficient of x is the ___**slope**___ of its corresponding graph.

5. Two lines are __**perpendicular**__ if the product of their slopes is – 1.

6. A(n) __**linear function**__ is a function that can be written in the form f(x) = mx + b.

MULTIPLE CHOICE Choose the best answer by circling the capital letter.

7. If $f(x) = -x^2$, find the value of f(- 3).

     A. 6   B. – 6   C. 9   **(D.)** – 9

8. If f(x) = 2x – 3, find the value of f(a + h).

     A. 2a + h – 3   B. 2x(a + h) – 3   **(C.)** 2a + 2h – 3   D. 2a + 2h

9. An ordered pair solution for the function g(x) is (- 6, 0). This solution written using function notation is:

     A. g(0) = - 6   **(B.)** g(- 6) = 0   C. g(- 6) = g(0)   D. – 6 = 0

10. Suppose y = f(x) and we are given that f(2) = 8. Which is not true?

    A. When x = 2, y = 8.

    B. A possible function is $f(x) = x^3$.

    (C.) A possible function is $f(x) = x - 6$.

    D. A point on the graph of the function is (2, 8).

11. Given: (0, 4) and (5, 0). Final answer: $f(x) = -\dfrac{4}{5}x + 4$. Select the correct instructions.

    A. Find the slope of the line through the two points.

    B. Find an equation of the line through the two points. Write the equation in standard form.

    (C.) Find an equation of the line through the two points. Write the equation using function notation.

MULTIPLE CHOICE *Use the given graph to fill in each blank using the choices below. Letters may be used more than once or not at all.*

A. f(3) = 4   D. – 9   G. (- ∞, ∞)

B. f(4) = 3   E. 2   H. (- ∞, 4]

C. 6   F. 0   I. (- ∞, 3]

12. The vertex written in function notation is __**B**__.

13. f(0) = __**D**__

14. f(8) = __**D**__

15. If f(x) = 0, then x = __**C**__ or x = __**E**__.
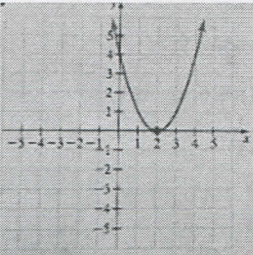
16. The domain of f(x) is __**G**__.
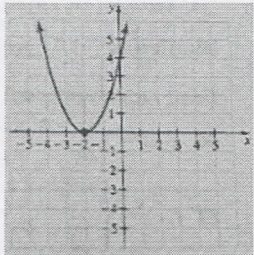
17. The range of f(x) is __**I**__.
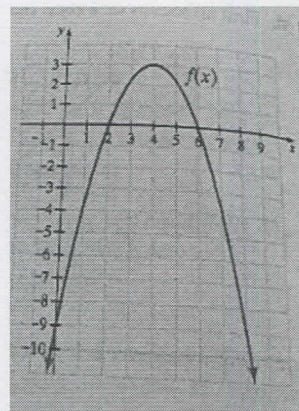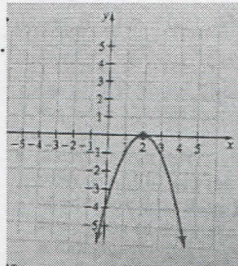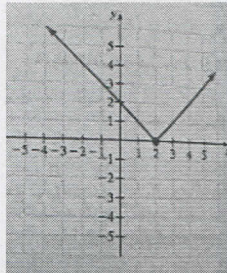
MULTIPLE CHOICE

18. The graph of $f(x) = (x - 2)^2$ is:

(A.)   B.   C.   D.

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.

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |

Basic   Intermediate   Advanced   Solved ALL!