$\qquad$ Date $\qquad$ Pd $\qquad$

## 8.1-8.3 Review DAY ONE CYU

$\square$ Use when you get it right all by yourself
S Use when you did it all by yourself, but made a silly mistake
$\boldsymbol{H}$ Use when you could do it alone with a little help from teacher or peer
$\boldsymbol{G}$ Use when you completed the problem in a group
X Use when a question was attempted but wrong (get help)
$N$ Use when a question was not even attempted

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

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

1. $\qquad$ lines have the same slope and different y-intercepts.
2. $\qquad$ form of a linear equation in two variables is $y=m x+b$.
3. $A(n)$ $\qquad$ is a relation in which each first component in the ordered pairs corresponds to exactly one second component.
4. In the equation $y=4 x-2$, the coefficient of $x$ is the $\qquad$ of its corresponding graph.
5. Two lines are $\qquad$ if the product of their slopes is -1 .
6. $A(n)$ $\qquad$ is a function that can be written in the form $f(x)=m x+b$.

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 $f(x)=2 x-3$, find the value of $f(a+h)$.
A. $2 a+h-3$
B. $2 x(a+h)-3$
C. $2 a+2 h-3$
D. $2 a+2 h$
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: $f(x)=-\frac{4}{5} x+4$. 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. $f(3)=4$
B. $f(4)=3$
C. 6
D. -9
E. 2
F. 0
G. $(-\infty, \infty)$
H. $(-\infty, 4]$
I. $(-\infty, 3]$
12. The vertex written in function notation is $\qquad$ .
13. $f(0)=$ $\qquad$
14. $f(8)=$ $\qquad$
15. If $f(x)=0$, then $x=$ $\qquad$ or $x=$ $\qquad$ .
16. The domain of $f(x)$ is $\qquad$ .

17. The range of $f(x)$ is $\qquad$ .

## 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.


