Name Key Date _____ Pd ____

8.2 Function Notation & Graphing Nonlinear Functions DAY TWO CYU

☑ *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)*

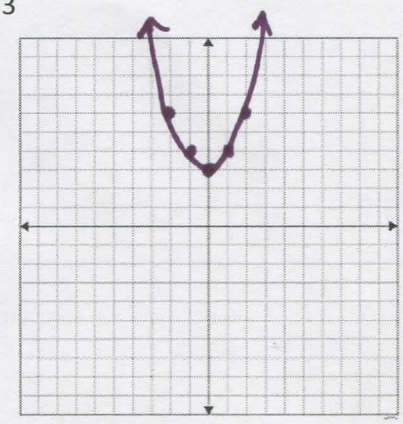
N *Use when a question was not even attempted*

CONCEPTS	BASIC	INTERMEDIATE	ADVANCED
Using the calculator to graph	1 – 8		
Creating a table	1 – 8		
Plotting coordinates	1 - 8		
Real world application	9		
Simplifying radicals	10 - 13		

Graph each function by finding and plotting ordered pair solutions.

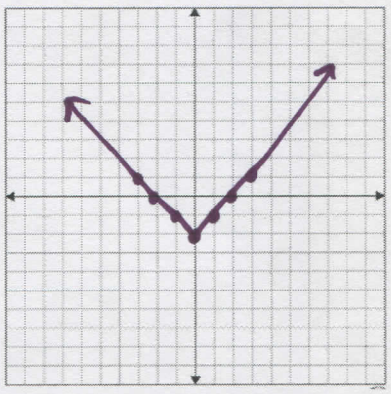
1. $f(x) = x^2 + 3$

x	y
-2	7
-1	4
0	3
1	4
2	7



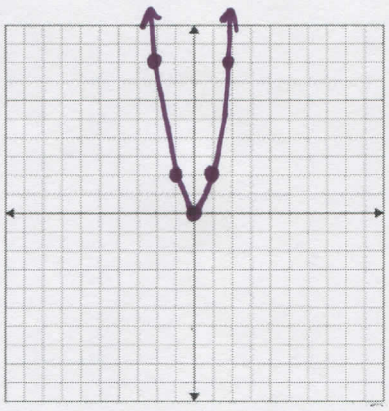
2. $h(x) = |x| - 2$

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



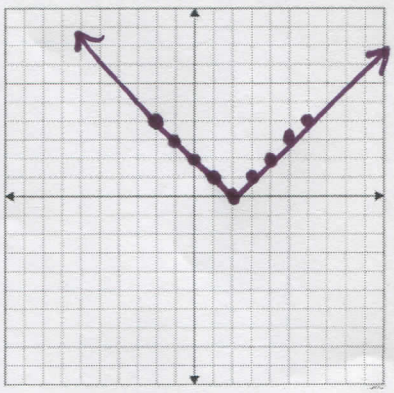
3. $g(x) = 2x^2$

x	y
-2	8
-1	2
0	0
1	2
2	8



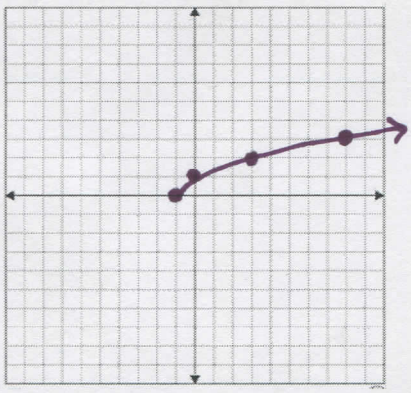
4. $f(x) = |x - 2|$

x	y
-2	4
-1	3
0	2
1	1
2	0



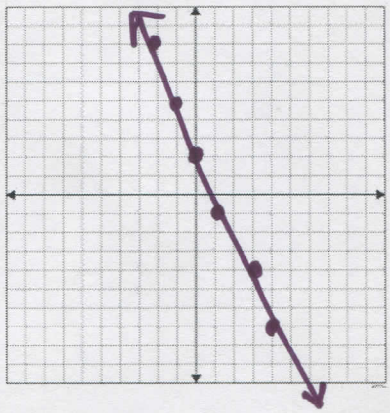
5. $f(x) = \sqrt{x+1}$

x	y
-2	i
-1	0
0	1
1	$\sqrt{2}$
2	$\sqrt{3}$
3	2
8	3



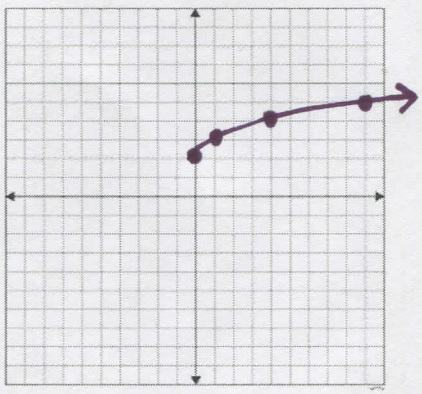
6. $j(x) = -3x + 2$

x	y
-2	8
0	2
1	-1
2	-4
3	-7



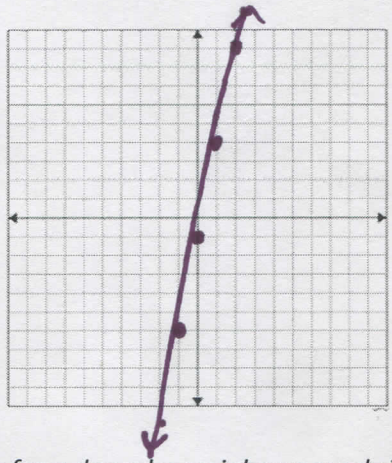
7. $h(x) = \sqrt{x} + 2$

x	y
0	2
1	3
4	4
9	5
16	6



8. $g(x)\ 5x - 1$

x	y
-2	-11
-1	-6
0	-1
1	4
2	9



The dosage in milligrams D of Ivermectin, a heartworm preventative for a dog who weighs x pounds is given by $D(x) = \frac{136}{25}x$.

9. Find the proper dosage for a dog that weighs 30 pound & 50 pounds.

163.2 mg ; 272 mg

Simplify the following roots.

10. $\sqrt{-25}$

5i

nonreal

11. $2\sqrt{9}$

2·3

6

12. $-\sqrt{36}$

-6

13. $\sqrt{\frac{16}{121}} = \frac{\sqrt{16}}{\sqrt{121}}$

$\frac{4}{11}$

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.