$\qquad$ Date $\qquad$ Pd $\qquad$
8.2 Function Notation \& Graphing Nonlinear Functions DAY TWO CYU
$\square$ Use when you get it right all by yourself
$\boldsymbol{S}$ 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 |
| :--- | :---: | :---: | :---: |
| 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. $f(x)=x^{2}+3$


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



$$
\text { 3. } g(x)=2 x^{2}
$$

| $x$ | $y$ |
| :---: | :---: |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |


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


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


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

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


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



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.

Simplify the following roots.
10. $\sqrt{-25}$
11. $2 \sqrt{9}$
12. $-\sqrt{36}$
13. $\sqrt{\frac{16}{121}}$

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.


