

Parent Function Homework Worksheet

1- 7 Give the name of the parent function.

1. $g(x) = x^2 - 1$ Quadratic

2. $f(x) = 2^x$ Exponential

3. $h(x) = \sqrt{x-2}$ Radical/Sq. Root

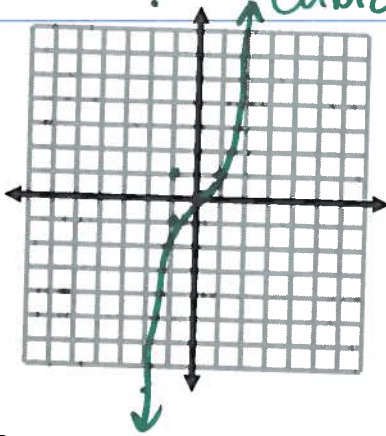
4. $g(x) = x^3 + 3$ Cubic

5. $g(x) = x + 8$ Linear

6. $f(x) = |x+5| - 2$ Absolute Value

7- 12 Draw the basic graph for the parent function. (Make a table to help graph)

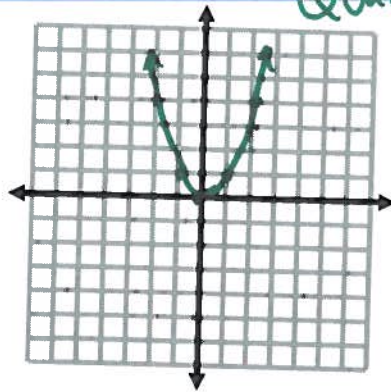
7. $h(x) = x^3 - 3$



Cubic $f(x) = x^3$
 $y = x^3$

x	y
-3	-27
-2	-8
-1	-1
0	0
1	1
2	8
3	27

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

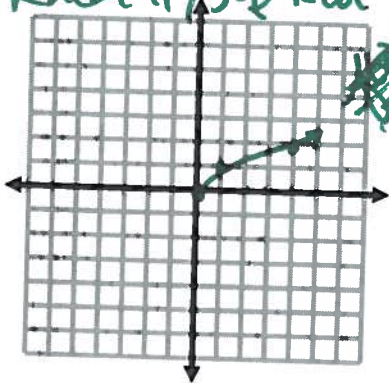


Quadratic $f(x) = x^2$

x	y
-3	9
-2	4
-1	1
0	0
1	1
2	4
3	9

8. $g(x) = 3\sqrt{x}$

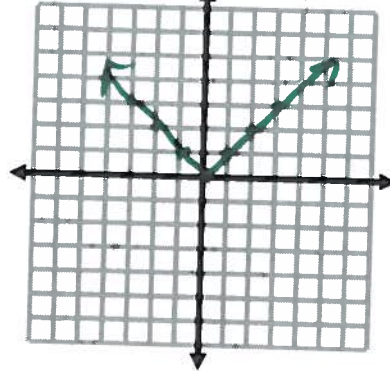
Radical/Sq. Root



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

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

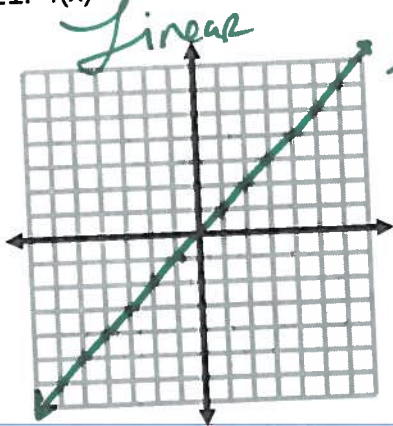
Absolute Value



$f(x) = |x|$

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

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

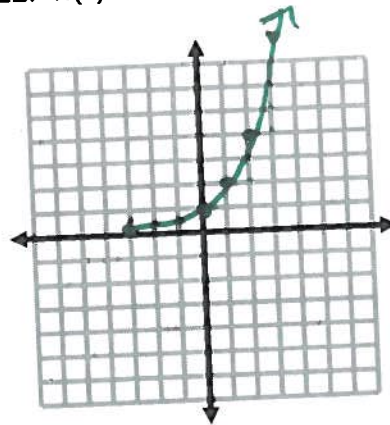


Linear

$f(x) = x$

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

12. $h(x) = 2^x$



Graph #12 as $h(x) = 2^x$

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

#13 - 17 Give an example of an equation represented by the following family of functions. (Do not use any of the examples from #1 -12!)

13. Absolute value _____

14. Square root _____

15. Cubic _____

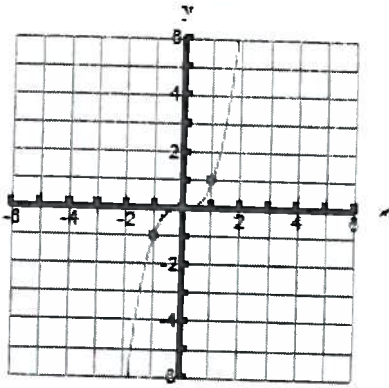
16. Exponential _____

17. Quadratic _____

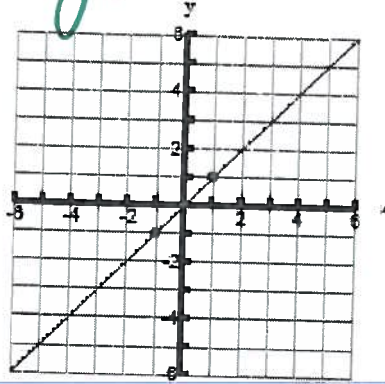
Answers Vary

#18 - 21 Name the parent function for each of the following graphs.

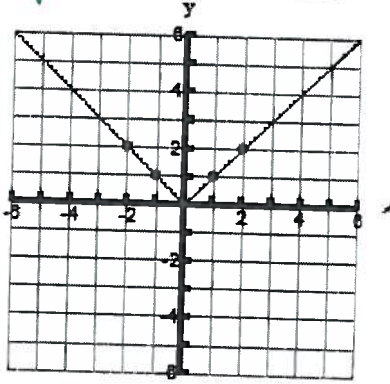
18. Cubic



20. Linear



19. Absolute Value



21. Quadratic

