

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. $h(x) = \sqrt{x-2}$ Square Root

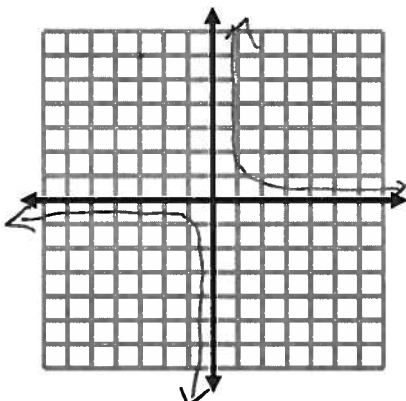
4. $g(x) = x^3 + 3$ Cubic

5. $g(x) = \frac{1}{x+6}$ Rational

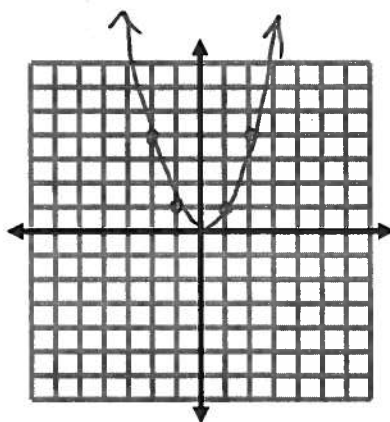
6. $f(x) = |x+5| - 2$ Absolute Value

* 7- 12 Draw the basic graph for the parent function.

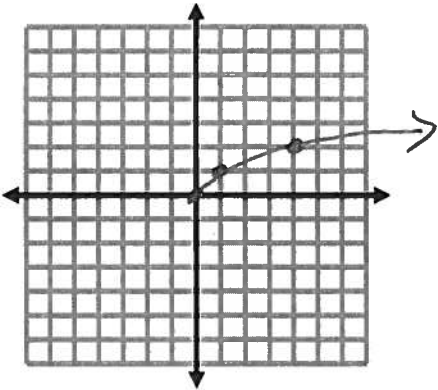
7. $h(x) = \frac{1}{x} - 5$ $f(x) = \frac{1}{x}$



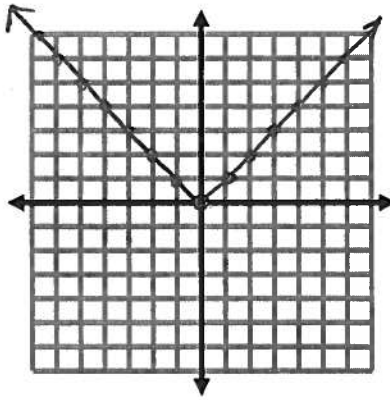
9. $h(x) = -x^2 + 1$ $f(x) = x^2$



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

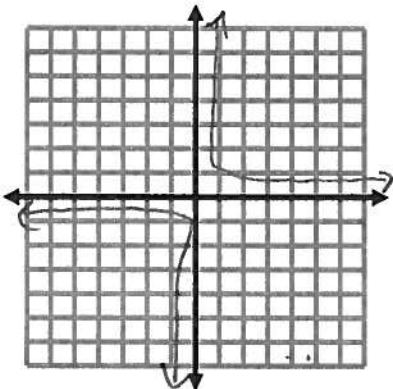


10. $h(x) = -|x-2|$ $f(x) = |x|$



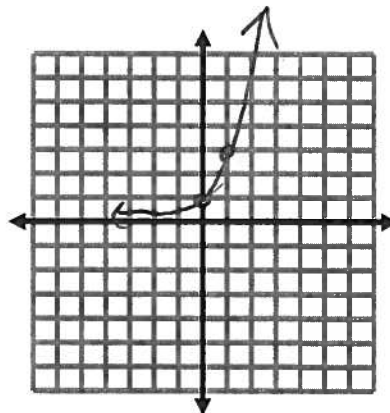
11. $f(x) = \frac{2}{x} - 3$

$f(x) = \frac{1}{x}$



12. $h(x) = 3^x$

$f(x) = 3^x$



*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 $f(x) = -3|x+2|$

14. Square root $f(x) = \sqrt{x+3}$

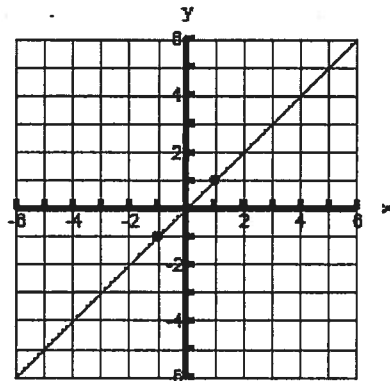
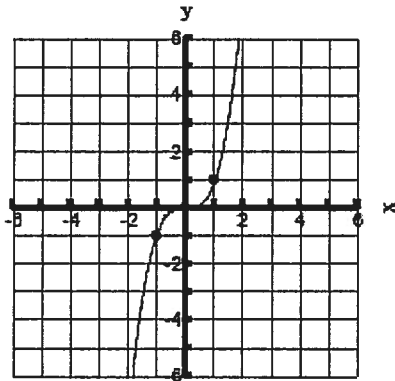
15. Cubic $f(x) = x^3 - 2$

16. Reciprocal $f(x) = \frac{1}{x+3}$

17. Quadratic $f(x) = (x+3)^2$

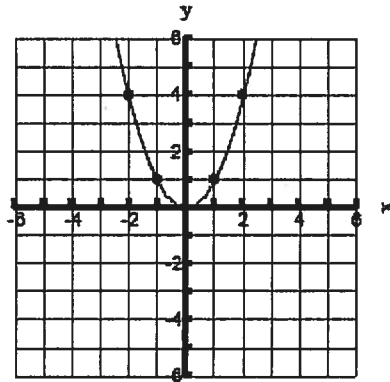
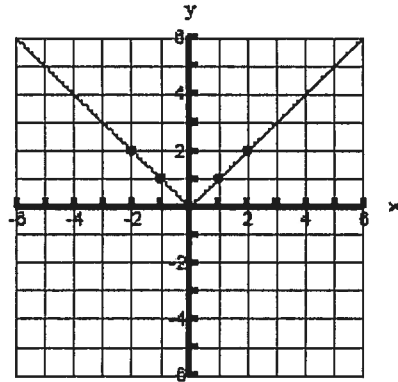
*18 - 21 Name the parent function for each of the following graphs.

18. Cubic 20. linear



19. Absolute Value

21. Quadratic



*22 - 24 Make up a real life example of each of the following parent functions (exponential, linear and quadratic).

answers will vary