

Name: Key Hour: \_\_\_\_\_ Date: \_\_\_\_\_

Parent Functions Practice:

Name the family from which the given function came.

1.  $g(x) = x^2 - 1$  Polynomial (even)

2.  $f(x) = 2|x-1|$  Absolute Value

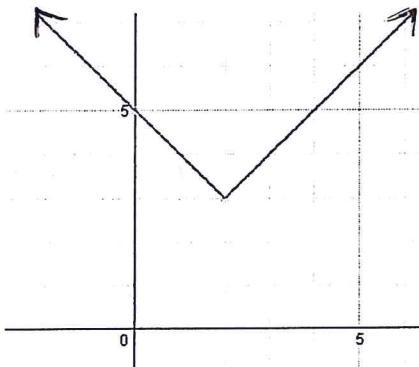
3.  $h(x) = \sqrt{x-2}$  Radical (even)

4.  $g(x) = x^3 + 3$  Polynomial (odd)

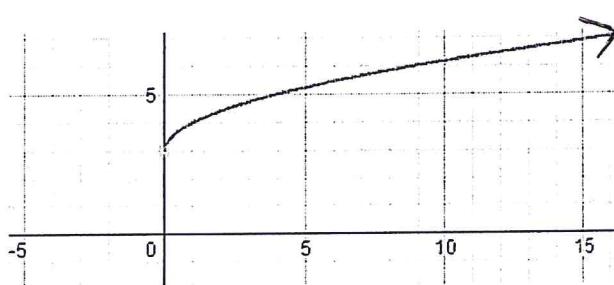
5.  $f(x) = 2x + 7$  Linear

Determine the parent function of the transformed graph.

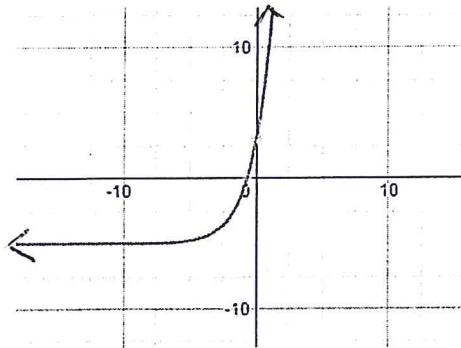
Parent  $f(x) = |x|$



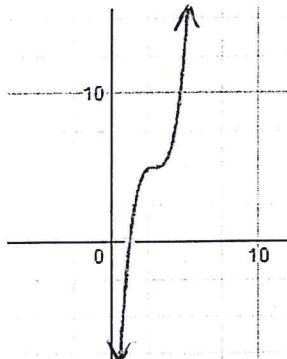
Parent  $f(x) = \sqrt{x}$



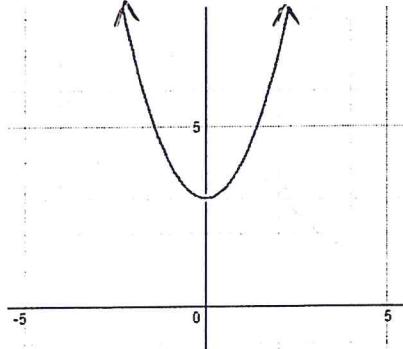
Parent  $f(x) = 2x$



Parent  $f(x) = x^3$

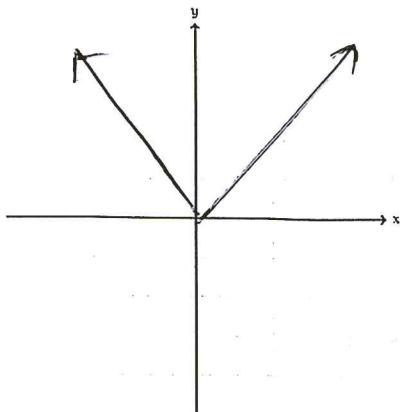


Parent  $f(x) = x^2$

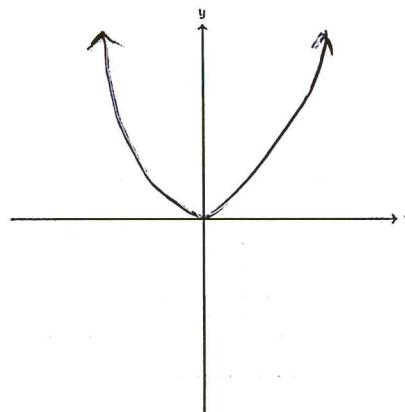


Write the equation of the parent function and sketch its graph.

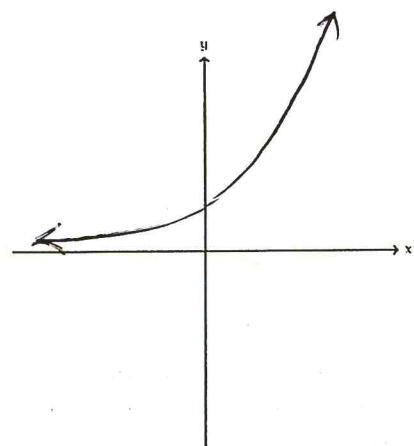
Absolute value  $f(x) = |x|$



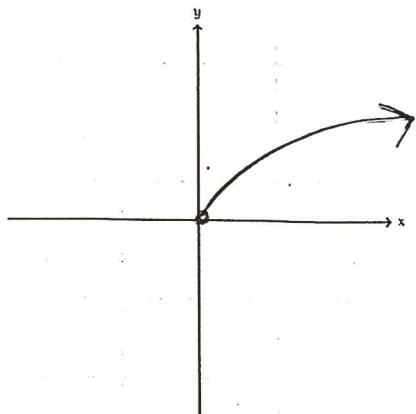
Polynomial (even)  $f(x) = x^2$



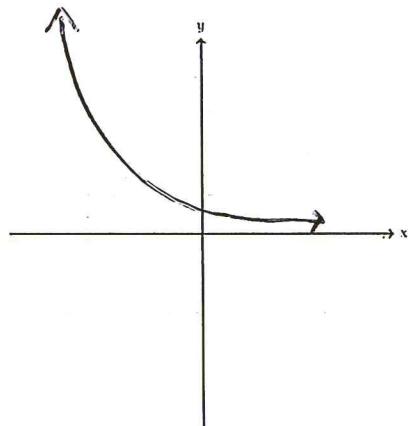
Exponential Growth  $f(x) = 2^x$



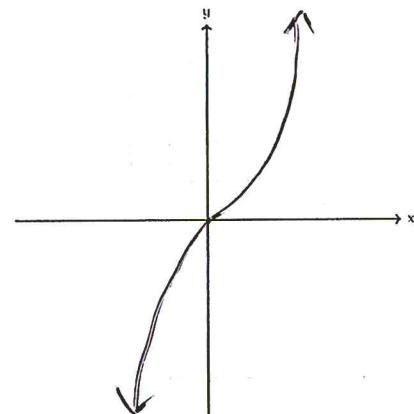
Radical (even)  $f(x) = \sqrt{x}$



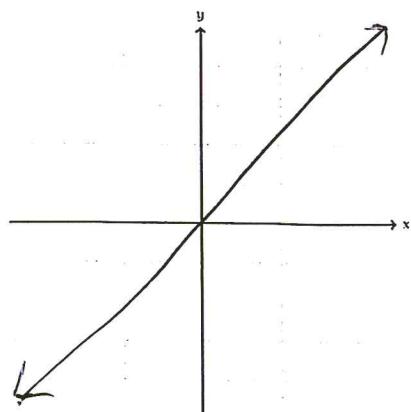
Exponential Decay  $f(x) = \left(\frac{1}{2}\right)^x$



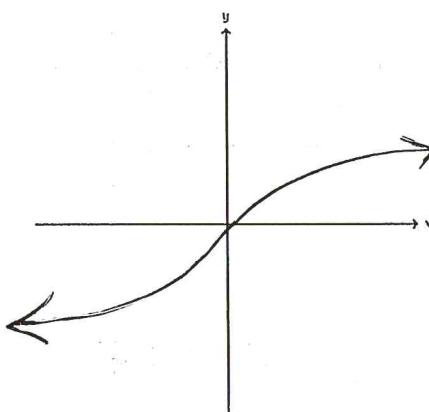
Polynomial (Odd)  $f(x) = x^3$



Linear  $f(x) = x$



Radical (odd)  $f(x) = \sqrt[3]{x}$



Logarithm  $f(x) = \log x$

