

# Parent Graph Graphic Organizer

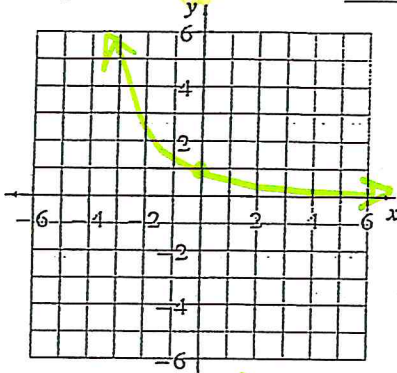
Parent Graph Family:

Exp (decay)

Equation:

$$y = .5^x$$

Graph:



Domain:  $(-\infty, \infty)$  Range:  $y > 0$

Locator point:

int (0, 1)  
asymptote

Table:

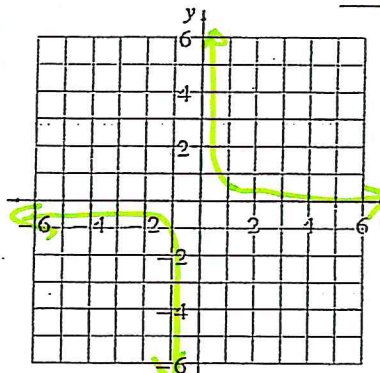
x	y
-3	8
-2	4
-1	2
0	1
1	.5
2	.25
3	.125

Parent Graph Family:

Rational

Equation:

$$f(x) = 1/x$$



Domain:  $x \neq 0$  Range:  $y \neq 0$

Locator point:

Table:

x	y
-3	-1/3
-2	-1/2
-1	-1
0	und
1	1
2	0.5
3	1/3

asymptotes

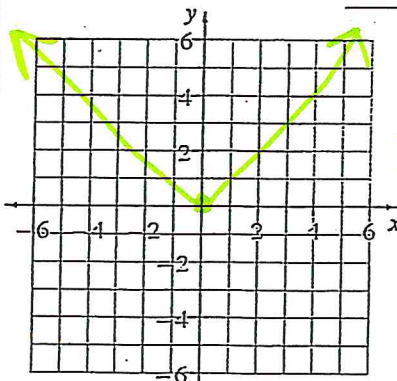
$y=0$   
 $x=0$

Parent Graph Family:

Abs value

Equation:

$$f(x) = |x|$$



Domain:  $(-\infty, \infty)$  Range:  $y \geq 0$

Locator point:

(0, 0)  
(0, ∞)

Table:

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

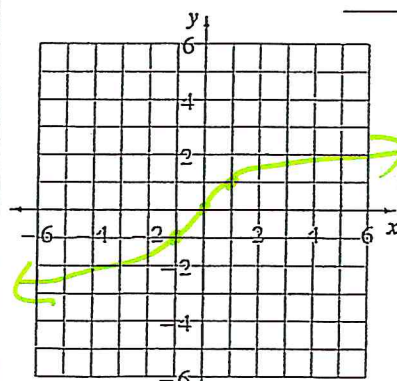
int (0, 0)

Parent Graph Family:

Cube Root

Equation:

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



Domain:  $(-\infty, \infty)$  Range:  $(-\infty, \infty)$

Locator point:

Table:

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

int (0, 0)