

Ex 2 $y = \frac{2}{(x+1)^2} - 3$ Parent $y = \frac{1}{x^2}$

Parent

x	y
1	1
-1	1
2	$\frac{1}{4}$
-2	$\frac{1}{4}$
$\frac{1}{2}$	4
$-\frac{1}{2}$	4
0	undefined

HA $y=0$

VA $x=0$

Reflection
Stretch/Shrink

x	2y
1	2
-1	2
2	$\frac{1}{2}$
-2	$\frac{1}{2}$
$\frac{1}{2}$	8
$-\frac{1}{2}$	8
0	undefined

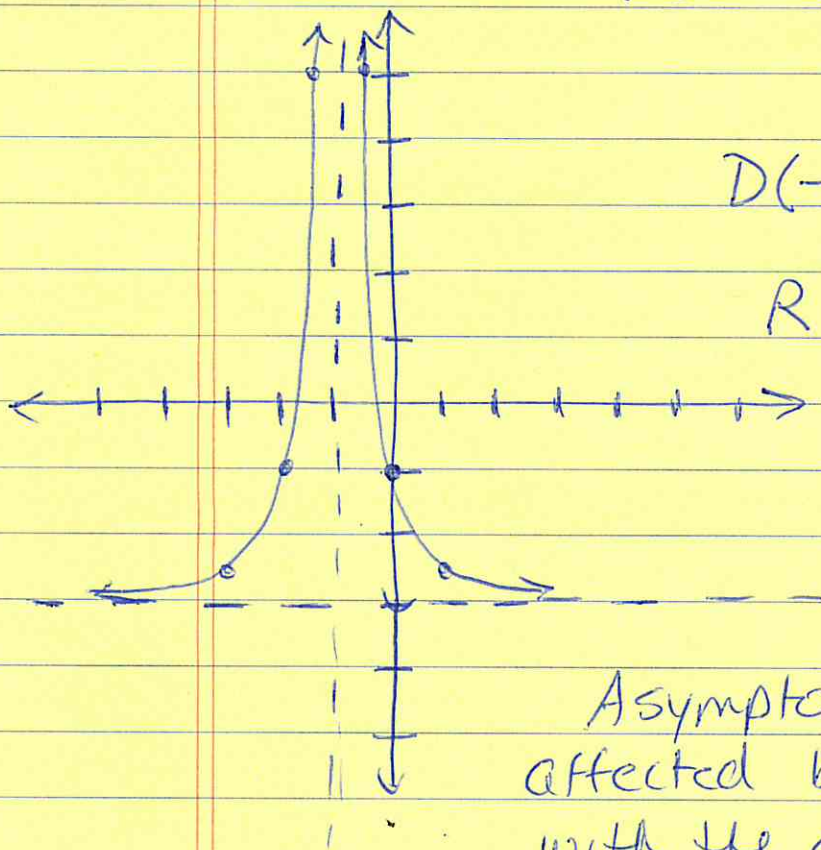
$y=0$ (no stretch/
change)
 $x=0$

Translation 1, 3D

x-1	y-3
0	-1
-2	-1
1	$-\frac{9}{2}$
-3	$-\frac{5}{2}$
$-\frac{1}{2}$	5
$-\frac{3}{2}$	5
-1	undefined

$y=-3$

$x=-1$



$D(-\infty, -1) \cup (-1, \infty)$

$R(-3, \infty)$

EB As $x \rightarrow \infty, y \rightarrow -3$
As $x \rightarrow -\infty, y \rightarrow -3$

Asymptotes from parent are affected by $h+k$! They move with the graph. They also affect $D, R + EB$!