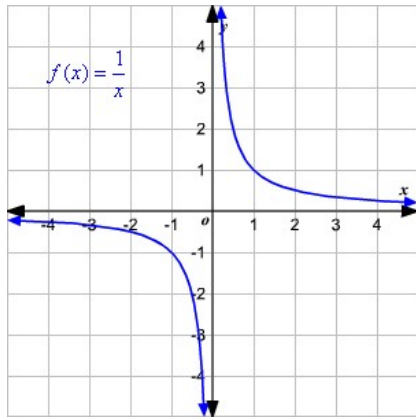


The Rational Parent Function

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

-1000	
-100	
-10	
-1	
-.1	
-.01	
-.001	
0	



0	
.001	
.01	
.1	
1	
10	
100	
1000	

Parent Graph Characteristics:

Domain:

Range:

Max/Min:

X-Int: Y-Int:

Int. of Inc:

Int of Dec:

V. Asymptote:

H. Asymptote:

End Behavior: As $x \Rightarrow -\infty$, $y \Rightarrow$ ____
As $x \Rightarrow \infty$, $y \Rightarrow$ ____

Transformations

of Rational Functions

$$f(x) = \frac{a}{x-h} + k$$

Identify the transformations and graph each rational function as a transformation of the parent graph.

Transformations:

$$f(x) = \frac{2}{x-4} + 5$$

Domain:

Range:

Y-Int:

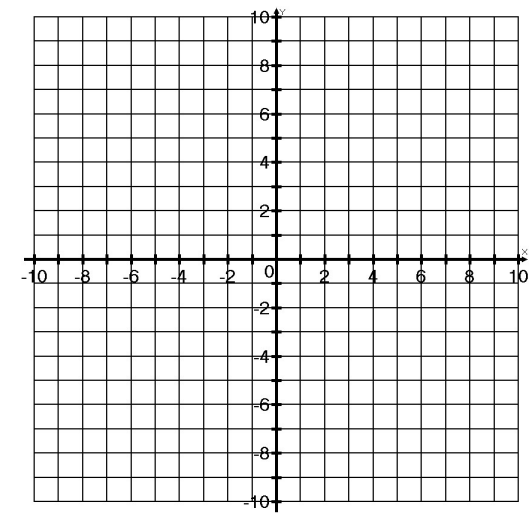
Int of Inc:

Int of Dec:

V. Asymptote:

H. Asymptote:

End Behavior:



Transformations:

$$f(x) = \frac{-3}{x+1} - 4$$

Domain:

Range:

Y-Int:

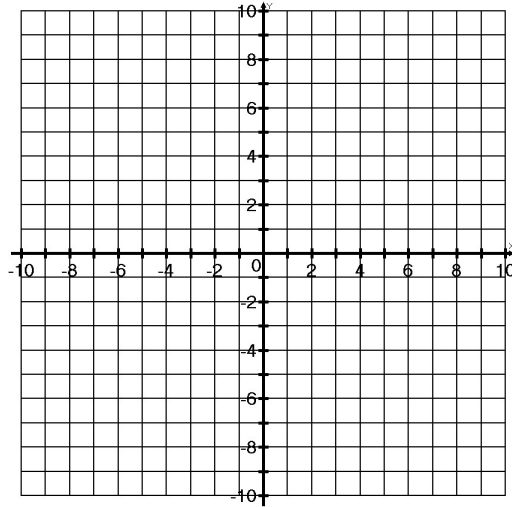
Int of Inc:

Int of Dec:

V. Asymptote:

H. Asymptote:

End Behavior:



Transformations:

$$f(x) = \frac{-3}{x+1} - 4$$

Domain:

Range:

Y-Int:

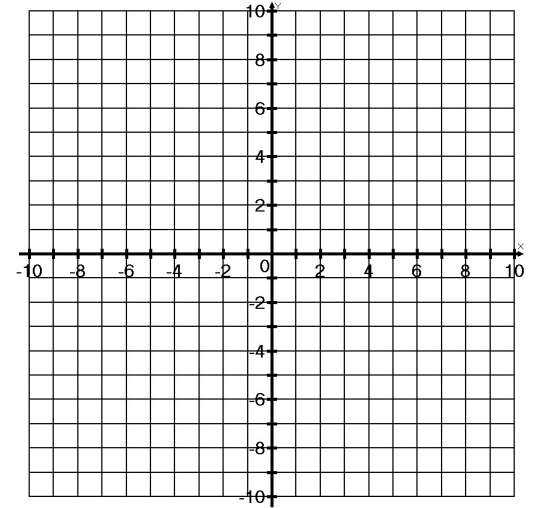
Int of Inc:

Int of Dec:

V. Asymptote:

H. Asymptote:

End Behavior:



Transformations:

$$f(x) = \frac{-2}{x+4} + 1$$

Domain:

Range:

Y-Int:

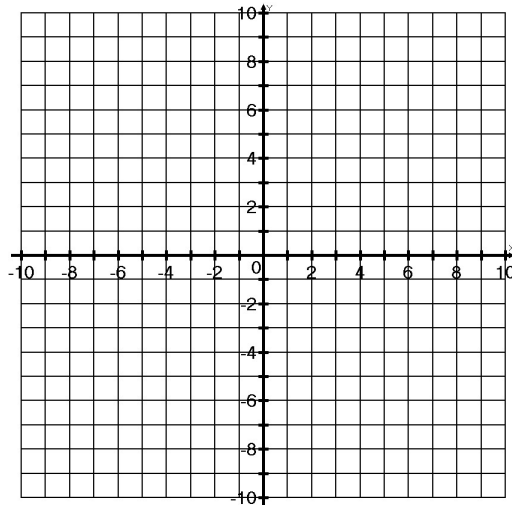
Int of Inc:

Int of Dec:

V. Asymptote:

H. Asymptote:

End Behavior:



Transformations:

$$f(x) = \frac{-2}{x+4} + 1$$

Domain:

Range:

Y-Int:

Int of Inc:

Int of Dec:

V. Asymptote:

H. Asymptote:

End Behavior:

