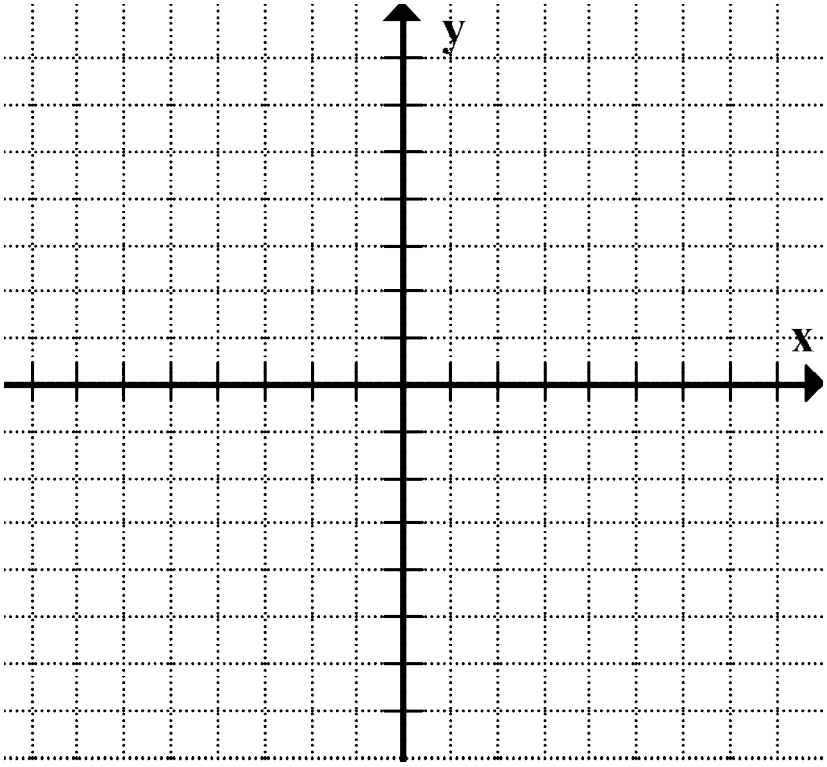
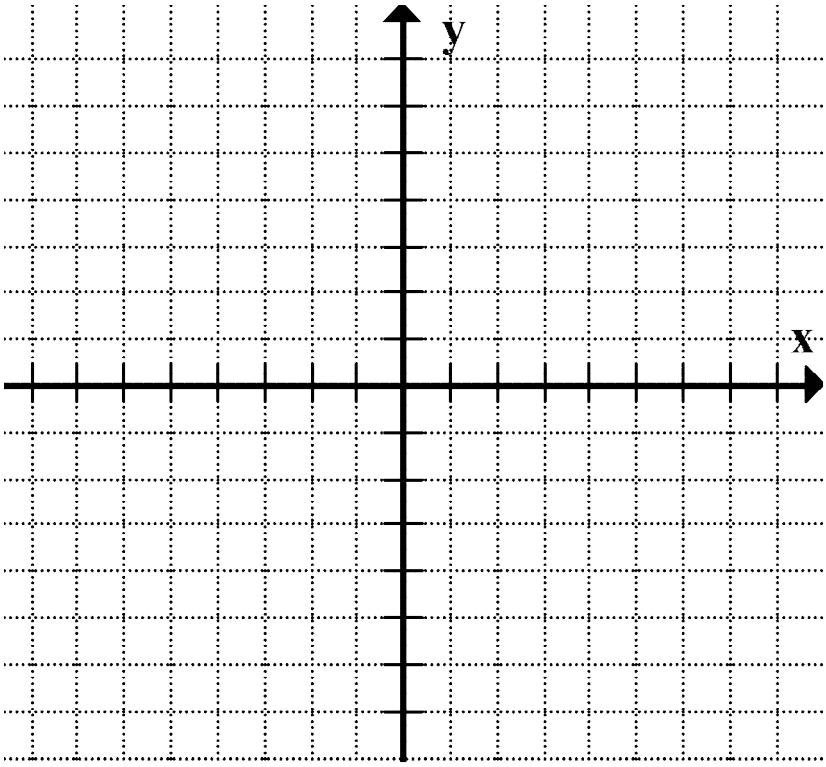
C12 - 9.1 - Vertical/Horizontal Asymptote HW

$$y = \frac{1}{x-2}$$

x	y
-10	
1	
1.9	
2	
2.1	
3	
10	

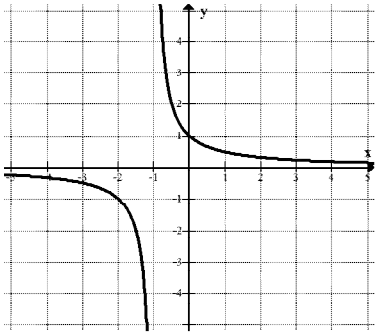


x	Y
-100	
-10	
-9	
-8	
2	
8	
9	
10	
100	

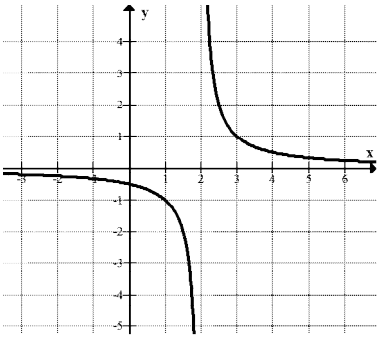


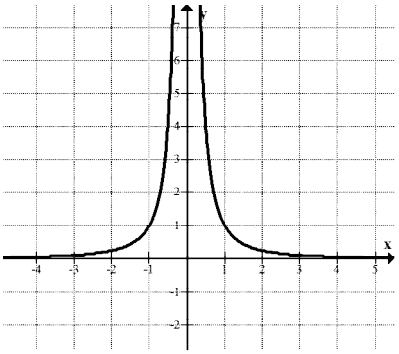
C12 - 9.1 - Vertical Asymptote HW

Find the equation of the Vertical Asymptote



$x =$





Find the equation of the Vertical Asymptote

$f(x) = \frac{1}{x}$ $f(x) = \frac{1}{x-2}$ $f(x) = \frac{1}{x+3}$ $f(x) = \frac{1}{2x+3}$ $f(x) = \frac{x}{x-2}$

$x =$

$f(x) = \frac{x+1}{(x-2)(x+4)}$ $f(x) = \frac{2}{(x^2+4x-5)}$ $f(x) = \frac{1}{x^2+3}$

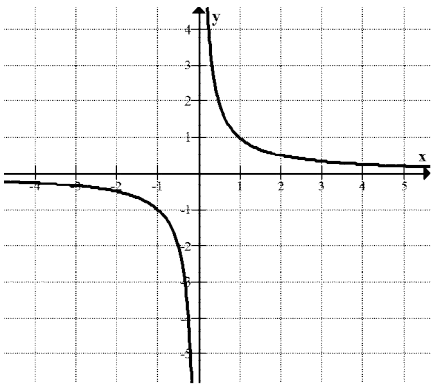
9.4 *Find the VA's and/or Holes*

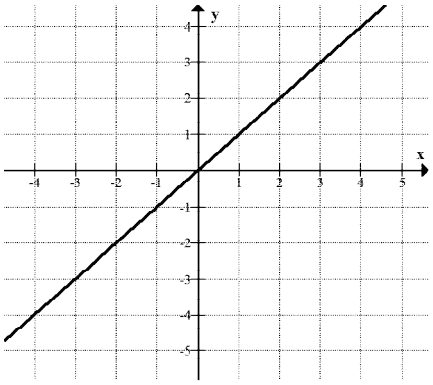
$f(x) = \frac{x^2-1}{x-1}$ $f(x) = \frac{x^2+6x+5}{x+5}$ $f(x) = \frac{x^2-4x}{2x}$ $f(x) = \frac{2x^2+7x+6}{x+2}$

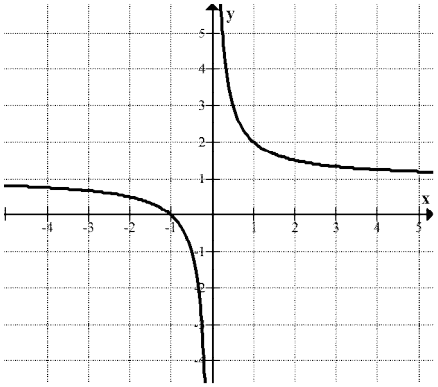
$f(x) = \frac{x+3}{x^2-9}$ $f(x) = \frac{x^2}{x^2-4}$ $f(x) = \frac{2x^2-5x-3}{2x^2+5x+2}$

C12 - 9.2 - Horizontal Asymptote HW

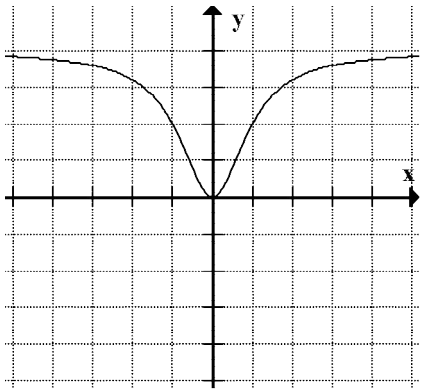
Find the equation of the Horizontal Asymptote

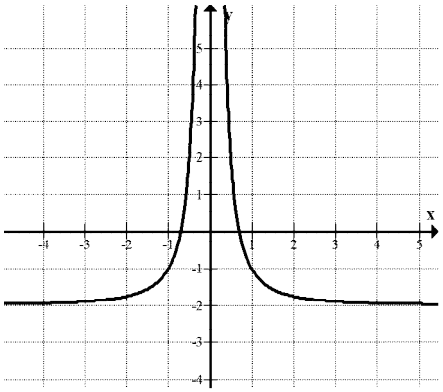


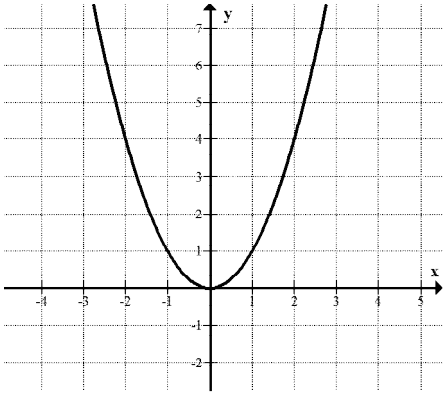




$y =$







Find the equation of the Horizontal Asymptote

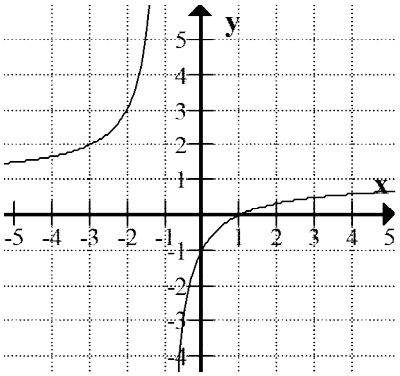
$y = \frac{1}{x-2}$ $y = \frac{1}{x}$ $y = \frac{1}{x^2}$ $y = \frac{6x^2}{(2x^2+1)}$ $y = \frac{10x^2+4}{4x^2-3}$

$y =$

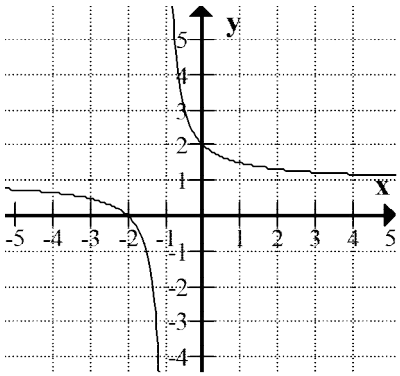
$y = \frac{1}{x-2} - 4$ $y = \frac{1}{x} + 1$ $y = \frac{1}{x^2} - 2$ $y = \frac{6x^2}{2x^2+1} + 1$ $y = \frac{10x^2+4}{4x^2-3} - 2$

C12 - 9.3 - x,y Intercepts HW

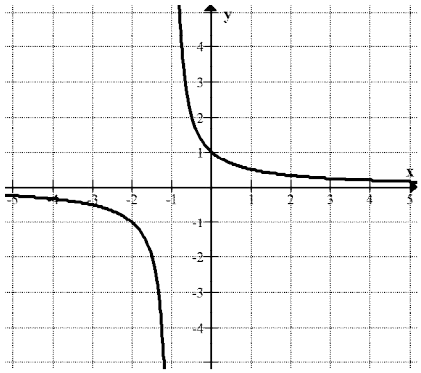
Find the x and y intercepts of the following.



$x - int$: $y - int$:



$x - int$: $y - int$:



$x - int$: $y - int$:

Find the x and y intercepts of the following.

$$\boldsymbol{y = \frac{x - 8}{x + 4}}$$

$$\boldsymbol{y = \frac{x}{x + 4}}$$

$$y = \frac{1}{x}$$

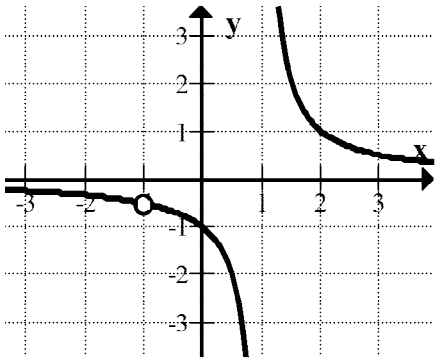
$$y = \frac{x^2 + 3x - 10}{x + 2}$$

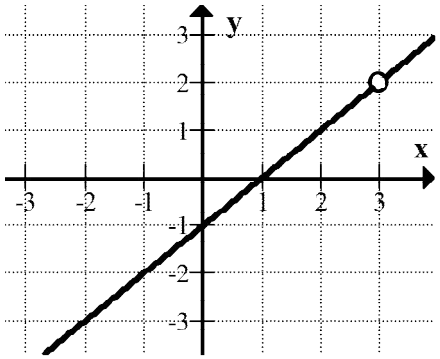
$$\boldsymbol{y = \frac{1}{x + 1} + 1}$$

$$\boldsymbol{y = \frac{-2x}{x + 1} + 1}$$

C12 - 9.4 - Holes HW

Find the location of the hole





Find the location of the hole

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

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

$f(x) = \dfrac{x}{4x^2+2x}$

$f(x) = \dfrac{x^2-5x+4}{x-1}$

$f(x) = \dfrac{x^2+7x+10}{x-2}$

$f(x) = \dfrac{x-4}{2x^2-7x-4}$