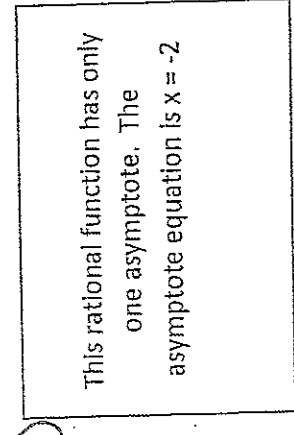
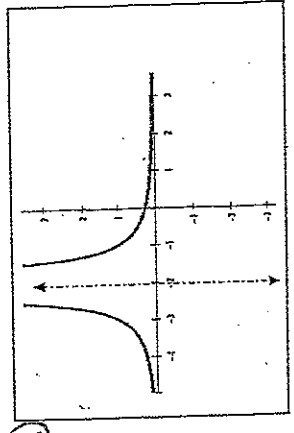
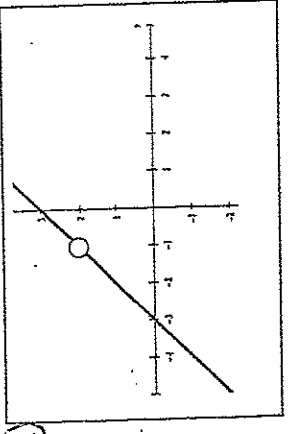
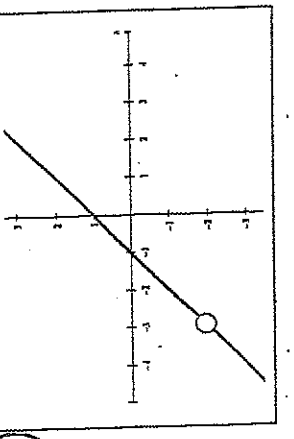


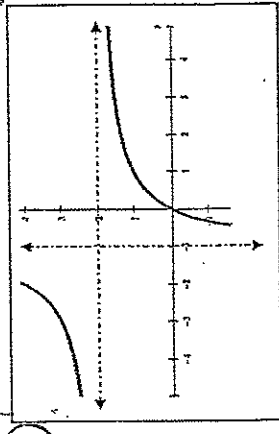
Manitoba Matching Activity - Rational Functions

Match a rational function equation to a graph or description. There are some equations that will match with more than one graph or description but, in the end, each equation should be matched to a different graph of description.



8.)

This rational function has a vertical asymptote at $x = 2$ and a horizontal asymptote at $y = 1$



6.)

This rational function has no vertical asymptotes and has a range on the interval $(0, 3]$

5.)

This rational function has vertical asymptotes at $x = 2$ and $x = -2$. It also has a horizontal asymptote at $y = 0$

10.)

This rational function has a hole when $x = -1$ and a horizontal asymptote at $y = 0$

9.)

This rational function has vertical asymptotes at $x = -1$ and $x = 1$ and a horizontal asymptote at $y = 0$

a) Rational Function matching

$$y = \frac{(x+1)(x+3)}{(x+3)}$$

b) Rational Function matching

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

c) Rational Function matching

$$y = \frac{1}{(x+1)(x-1)}$$

d) Rational Function matching

$$y = \frac{3}{x^2+1}$$

e) Rational Function matching

$$y = \frac{(x+1)(x+3)}{(x+1)}$$

f) Rational Function matching

$$y = \frac{1}{x^2-4}$$

g) Rational Function matching

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

h) Rational Function matching

$$y = \frac{x+1}{(x+1)(x+3)}$$

i) Rational Function matching

$$y = \frac{1}{(x+2)^2}$$

j) Rational Function matching

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