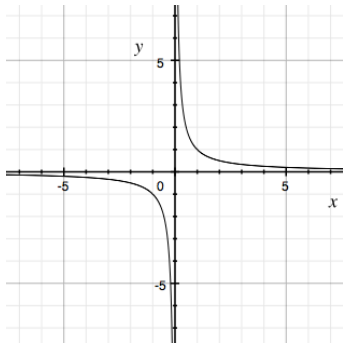


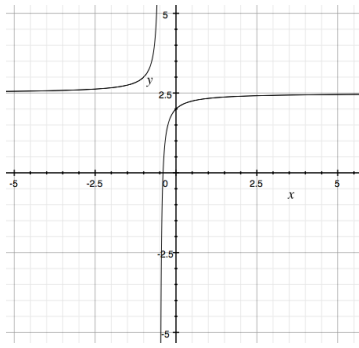
Number:

Textbook Section:

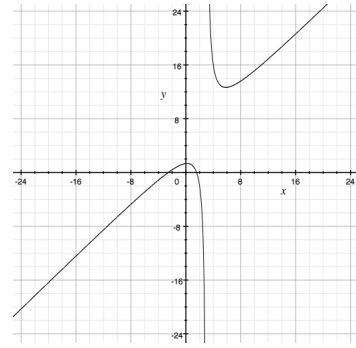
Title:



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



$$y = \frac{5x+2}{2x+1}$$



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

Informally:

Find the horizontal or slant/oblique asymptote of the function.

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

2.  $f(x) = \frac{2x^2 + x - 8}{x^2 - 4}$

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

4.  $r(x) = \frac{x^2 - 4x - 5}{x - 3}$

Bonus discussion:  $R(x) = \frac{x^3 + 3x^2 - 3}{x + 3}$