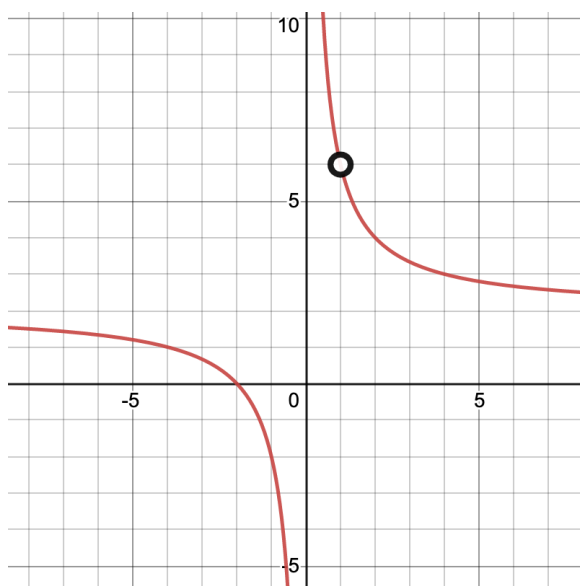


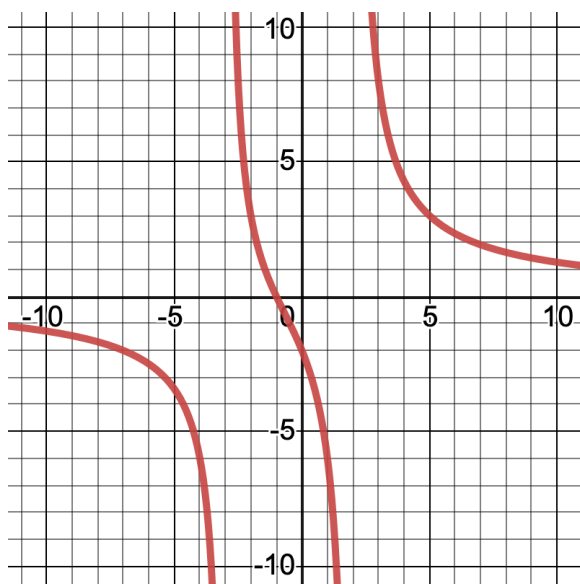
Instructions: Complete the exercises below. Be sure to show all of your work and write in complete sentences where appropriate. This worksheet contains questions similar to Quiz 2F.

1. In the following graphs of rational functions, identify whether the graphs have any holes, zeros, vertical asymptotes and vertical intercepts.

(a)



(b)



2. Find whether the following rational functions have any zeros, holes, vertical asymptotes and vertical intercepts:

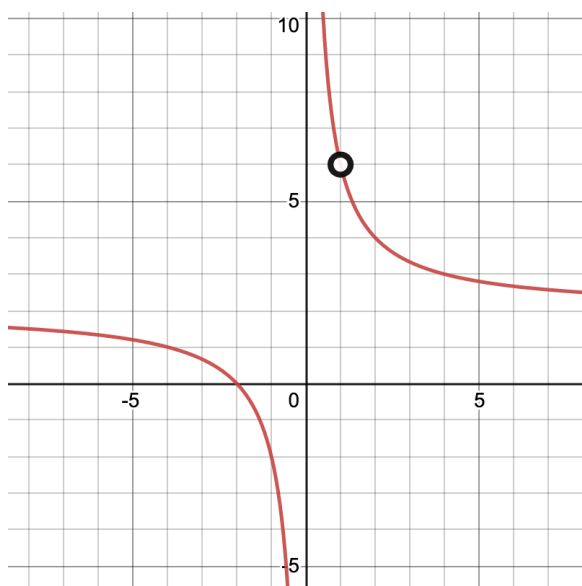
(a) $f(x) = \frac{x(x+1)}{(x-2)(x+1)}$

(b) $g(x) = \frac{50}{x^2 - 7x + 10}$

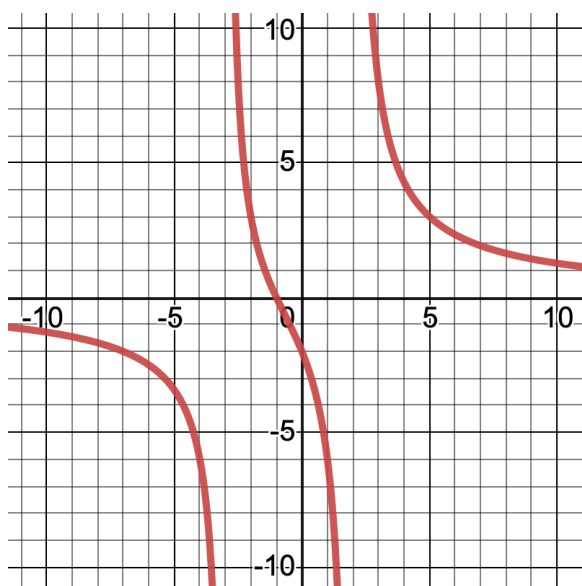
(c) $h(x) = \frac{6x^2 + 24x + 18}{x^2 - x - 12}$

3. Find the end behavior of the following rational functions:

(a)



(b)



4. Find the end behavior of the following rational functions, and list any horizontal asymptotes.

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

(b) $g(x) = \frac{50}{x^2 - 7x + 10}$

(c) $h(x) = \frac{6x^2 + 24x + 18}{x^2 - x - 12}$

(d) $p(x) = \frac{-7x^3 + 2x + 1}{x - 1}$