1. Find the domain of the function. Identify any horizontal and vertical asymptotes.

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

2. Find the domain of the function. Identify any horizontal and vertical asymptotes.

$$f(x) = \frac{8}{(x-2)^3}$$

3. Find the domain of the function. Identify any horizontal and vertical asymptotes.

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

4. Find the domain of the function. Identify any horizontal and vertical asymptotes.

$$f(x) = \frac{3-7x}{3+2x}$$

5. Find the domain of the function. Identify any horizontal and vertical asymptotes.

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

6. Find the domain of the function. Identify any horizontal and vertical asymptotes.

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

7. Find the domain of the function. Identify any horizontal and vertical asymptotes.

$$f(x) = \frac{3x^2+1}{x^2+x+9}$$

8. Find the domain of the function. Identify any horizontal and vertical asymptotes.

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

Match each rational function with its graph.

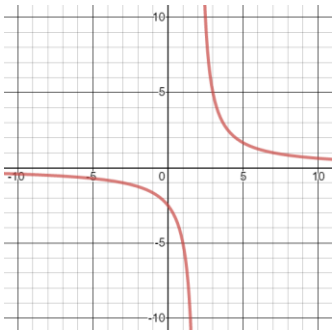
9. $f(x) = \frac{4}{x+5}$

10. $f(x) = \frac{5}{x-2}$

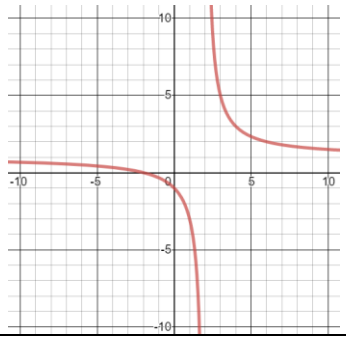
11. $f(x) = \frac{x-1}{x-4}$

12. $f(x) = \frac{x+2}{x+4}$

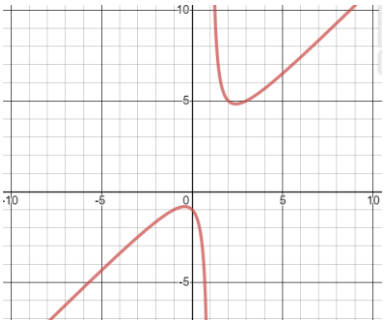
A.



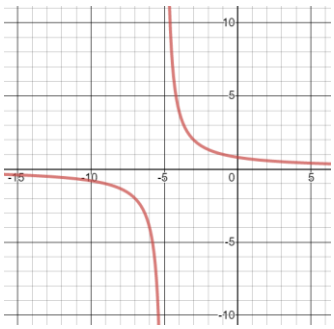
B.



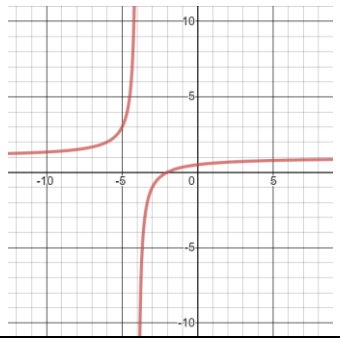
C.



D.



E.



F.