1. Solve the rational equation below.

$$\frac{6x}{-3x + 4} + \frac{-7x^2}{-6x^2 - 13x + 28} = \frac{2}{2x + 7}$$

2. Determine the domain of the function below.
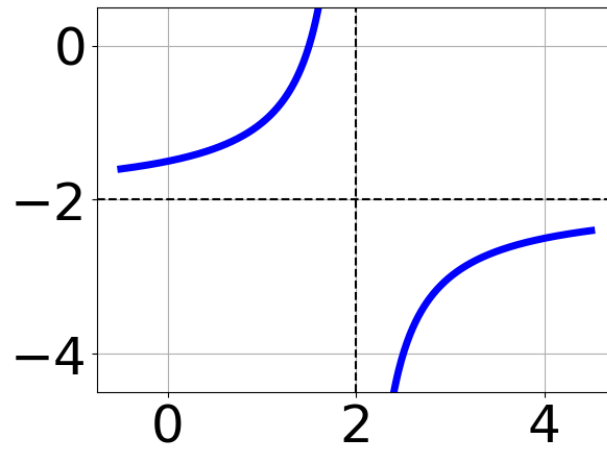
$$f(x) = \frac{4}{25x^2 - 9}$$

3. Solve the rational equation below.

$$\frac{3}{-9x - 2} + -3 = \frac{-4}{81x + 18}$$

4. Solve the rational equation below.

$$\frac{36}{24x - 108} + 1 = \frac{36}{24x - 108}$$

5. Write an equation that can represent the function graphed below.

6. Sketch a graph that represents the equation below.
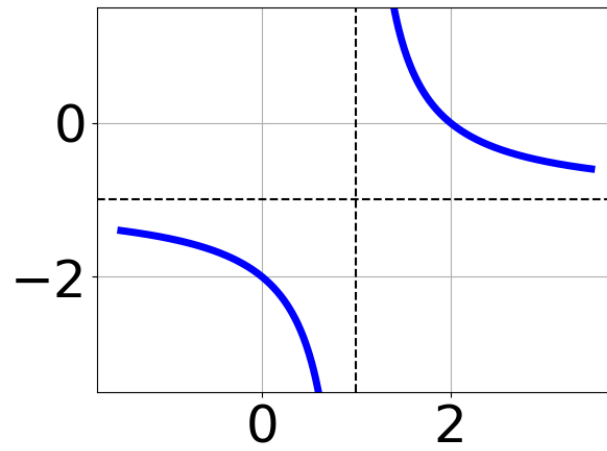
$$f(x) = \frac{1}{(x-1)^2} - 3$$

7. Determine the domain of the function below.

$$f(x) = \frac{5}{30x^2 - 30}$$

8. Solve the rational equation below.

$$\frac{4x}{2x+5} + \frac{-7x^2}{4x^2+16x+15} = \frac{3}{2x+3}$$

9. Write an equation that can represent the function graphed below.

10. Sketch a graph that represents the equation below.

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