31. Determine the domain of the function below.

$$f(x) = \frac{3}{18x^2 + 39x + 15}$$

- A. All Real numbers.
- B. All Real numbers except x = a, where  $a \in [-1.1, 0.6]$
- C. All Real numbers except x = a and x = b, where  $a \in [-1.1, 0.6]$  and  $b \in [-2.1, -0.6]$
- D. All Real numbers except x = a, where  $a \in [-18.5, -17.9]$
- E. All Real numbers except x=a and x=b, where  $a\in[-18.5,-17.9]$  and  $b\in[-16.1,-14.1]$
- 32. Solve the rational equation below. Then, choose the interval(s) that the solution(s) belongs to.

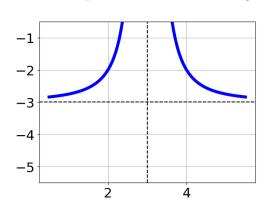
$$8 + \frac{4}{-8x + 5} = \frac{2}{-40x + 25}$$

- A.  $x \in [0.68, 0.71]$
- B.  $x \in [-0.59, -0.56]$
- C. All solutions lead to invalid or complex values in the equation.
- D.  $x_1 \in [-0.59, -0.56]$  and  $x_2 \in [-1, 1]$
- E.  $x_1 \in [0.58, 0.67]$  and  $x_2 \in [-1, 1]$
- 33. Solve the rational equation below. Then, choose the interval(s) that the solution(s) belongs to.

$$\frac{3x}{4x-5} - \frac{3x^2}{-16x^2 + 36x - 20} = -\frac{2}{-4x+4}$$

- A. All solutions lead to invalid or complex values in the equation.
- B.  $x \in [-5, 5]$
- C.  $x_1 \in [-5, 5]$  and  $x_2 \in [-3, 1]$
- D.  $x \in [-5, 5]$
- E.  $x_1 \in [-5, 5]$  and  $x_2 \in [-3, 1]$

34. Choose the equation of the function graphed below.



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

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

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

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

35. Choose the graph of the equation below.

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

D.

