31. Determine the domain of the function below.

$$f(x) = \frac{4}{20x^2 - 41x + 20}$$

- A. All Real numbers except x = a and x = b, where  $a \in [0.33, 0.91]$  and  $b \in [0.97, 1.6]$
- B. All Real numbers except x=a and x=b, where  $a\in[19.73,20.01]$  and  $b\in[19.73,20.01]$
- C. All Real numbers except x = a, where  $a \in [0.33, 0.91]$
- D. All Real numbers except x = a, where  $a \in [19.73, 20.01]$
- E. All Real numbers.
- 32. Solve the rational equation below. Then, choose the interval(s) that the solution(s) belongs to.

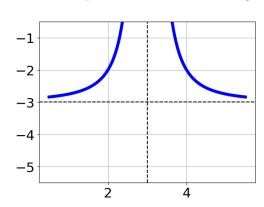
$$3 - \frac{5}{4x+4} = \frac{7}{-16x-16}$$

- A.  $x \in [0.84, 1.29]$
- B.  $x_1 \in [-0.27, 0.24]$  and  $x_2 \in [-2, 0]$
- C. All solutions lead to invalid or complex values in the equation.
- D.  $x_1 \in [0.84, 1.29]$  and  $x_2 \in [-2, 0]$
- E.  $x \in [-0.89, -0.43]$
- 33. Solve the rational equation below. Then, choose the interval(s) that the solution(s) belongs to.

$$-\frac{3x}{7x+3} - \frac{6x^2}{-42x^2 + 31x + 21} = \frac{5}{-6x+7}$$

- A.  $x_1 \in [4.6, 6.4]$  and  $x_2 \in [-0.87, 0.16]$
- B.  $x \in [-4.5, 0.6]$
- C. All solutions lead to invalid or complex values in the equation.
- D.  $x_1 \in [4.6, 6.4]$  and  $x_2 \in [-1.54, -0.69]$
- E.  $x \in [0.6, 3.9]$

34. Choose the equation of the function graphed below.



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

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

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

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

35. Choose the graph of the equation below.

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

