1. Solve the rational equation below. Then, choose the interval(s) that the solution(s) belongs to.

$$\frac{-2x}{4x-4} + \frac{-5x^2}{-28x^2+44x-16} = \frac{-4}{-7x+4}$$

A. $x \in [0.32, 0.75]$

B. $x \in [-2.27, -1.15]$

C. $x_1 \in [0.73, 1.4]$ and $x_2 \in [-0.3, 1.5]$

D. All solutions lead to invalid or complex values in the equation.

E. $x_1 \in [0.73, 1.4]$ and $x_2 \in [-2.8, -0.6]$

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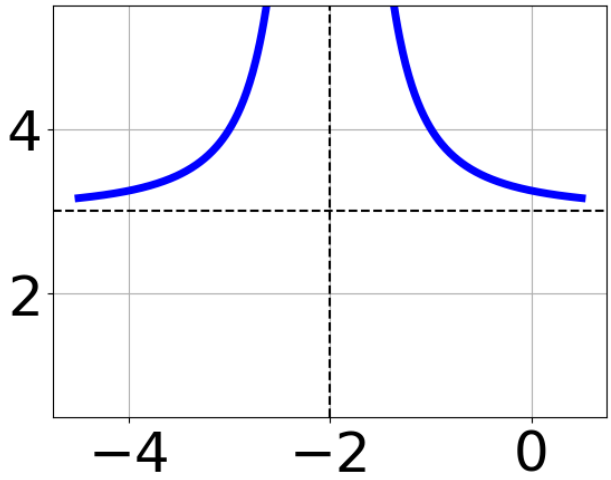
2. Choose the equation of the function graphed below.



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

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

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

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

E. None of the above

3. Solve the rational equation below. Then, choose the interval(s) that the solution(s) belongs to.

$$\frac{66}{-99x-33}+1=\frac{66}{-99x-33}$$

A. $x \in [0.1, 1.2]$

B. $x_1 \in [-0.6, 0.3]$ and $x_2 \in [-2, 0]$

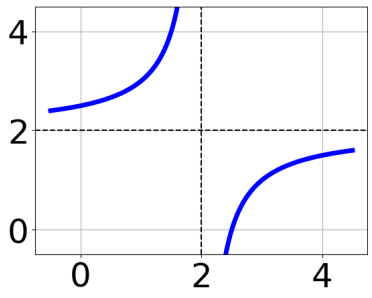
C. $x_1 \in [-0.6, 0.3]$ and $x_2 \in [0, 3]$

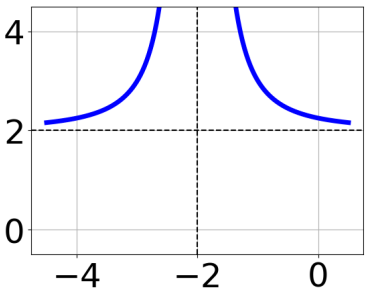
D. $x \in [-0.33, 1.67]$

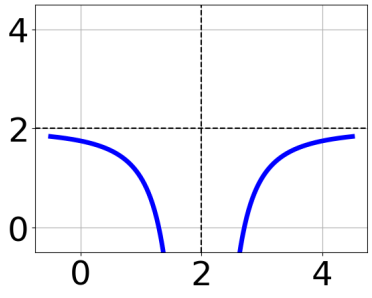
E. All solutions lead to invalid or complex values in the equation.

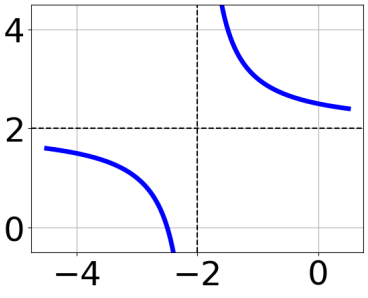
4. Choose the graph of the equation below.

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

A. 

C. 

B. 

D. 

E. None of the above.

5. Determine the domain of the function below.

$$f(x) = \frac{6}{15x^2 - 39x + 18}$$

A. All Real numbers except $x = a$, where $a \in [14.1, 15.7]$

B. All Real numbers except $x = a$ and $x = b$, where $a \in [14.1, 15.7]$ and $b \in [16.8, 20.5]$

C. All Real numbers.

D. All Real numbers except $x = a$ and $x = b$, where $a \in [-0.8, 1.2]$ and $b \in [1.6, 2.5]$

E. All Real numbers except $x = a$, where $a \in [-0.8, 1.2]$