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

$$\frac{-48}{-32x-32}+1=\frac{-48}{-32x-32}$$

A. $x \in [-0.8, 2.8]$

B. $x_1 \in [-1.5, 0.6]$ and $x_2 \in [0, 3]$

C. $x_1 \in [-1.5, 0.6]$ and $x_2 \in [-6, 0]$

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

E. $x \in [-1.0, 0.0]$

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

$$\frac{-6x}{6x+6}+\frac{-7x^2}{-36x^2-72x-36}=\frac{-6}{-6x-6}$$

A. $x_1 \in [-2.23, -1.62]$ and $x_2 \in [-0.82, -0.6]$

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

C. $x \in [-0.96, -0.4]$

D. $x_1 \in [-2.23, -1.62]$ and $x_2 \in [-1.06, -0.79]$

E. $x \in [-1, -0.96]$

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33. Determine the domain of the function below.

$$f(x)=\frac{4}{20x^2-4x-24}$$

A. All Real numbers.

B. All Real numbers except $x = a$, where $a \in [-3, 0]$

C. All Real numbers except $x = a$ and $x = b$, where $a \in [-21, -15]$ and $b \in [29, 34]$

D. All Real numbers except $x = a$, where $a \in [-21, -15]$

E. All Real numbers except $x = a$ and $x = b$, where $a \in [-3, 0]$ and $b \in [0, 2]$

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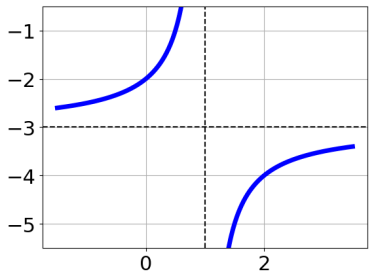
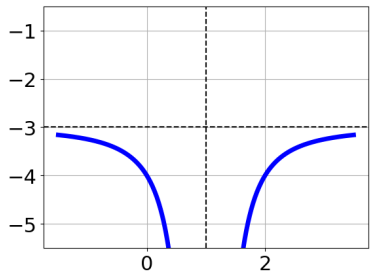
34. Choose the graph of the equation below.

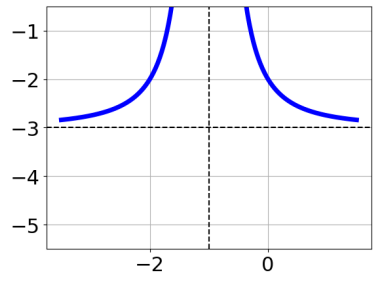
$$f(x)=\frac{-1}{(x-1)^2}-3$$

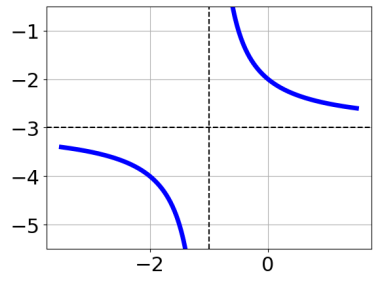
A.



B.



C. 

D. 

E. None of the above.

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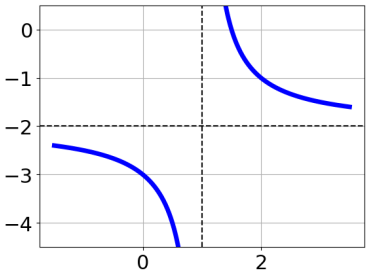
35. Choose the equation of the function graphed below.



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

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

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

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

E. None of the above
