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

$$\sqrt{2x-7}-\sqrt{-4x-8}=0$$

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

B. $x \in [-1.1, 1.7]$

C. $x_1 \in [-3.5, -0.3]$ and $x_2 \in [3, 7]$

D. $x \in [2.4, 4.6]$

E. $x_1 \in [-1.1, 1.7]$ and $x_2 \in [3, 7]$

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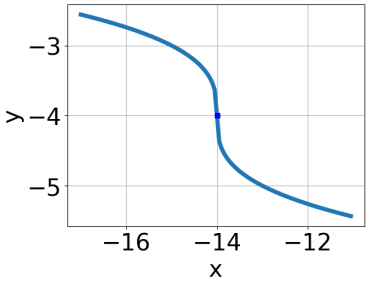
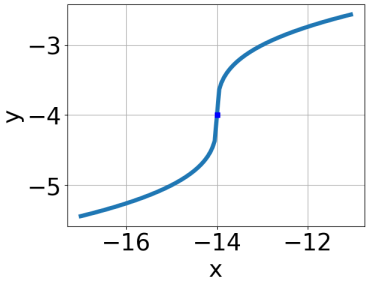
2. Choose the graph of the equation below.

$$f(x)=\sqrt[3]{x+14}-4$$

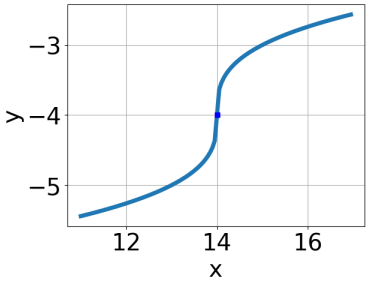
A.



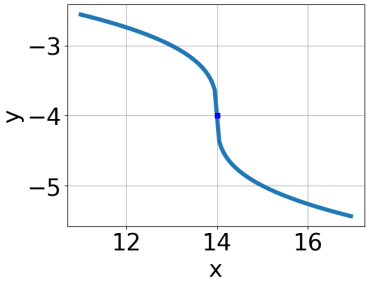
C.



B.



D.



E. None of the above.

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

$$\sqrt{45x^2 + 42} - \sqrt{93x} = 0$$

A. $x \in [1.01, 1.85]$

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

C. $x_1 \in [-1.43, -0.56]$ and $x_2 \in [-0.9, -0.4]$

D. $x_1 \in [0.62, 1.27]$ and $x_2 \in [0.8, 2.4]$

E. $x \in [0.62, 1.27]$

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4. What is the domain of the function below?

$$f(x) = \sqrt[3]{4x - 5}$$

A. The domain is $[a, \infty)$, where $a \in [0.34, 1.05]$

B. The domain is $(-\infty, a]$, where $a \in [1.13, 1.59]$

C. $(-\infty, \infty)$

D. The domain is $(-\infty, a]$, where $a \in [0.31, 0.82]$

E. The domain is $[a, \infty)$, where $a \in [1.11, 2.02]$

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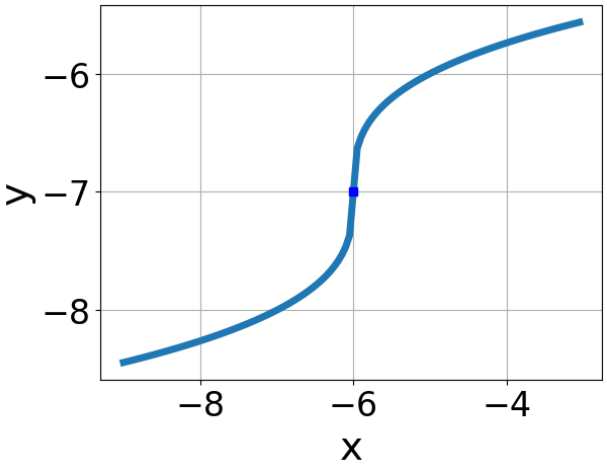
5. Choose the equation of the function graphed below.



A. $f(x) = -\sqrt[3]{x - 6} - 7$

B. $f(x) = -\sqrt[3]{x+6} - 7$

C. $f(x) = \sqrt[3]{x-6} - 7$

D. $f(x) = \sqrt[3]{x+6} - 7$

E. None of the above
