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

$$\sqrt{-16x^2 + 30} - \sqrt{-28x} = 0$$

A. $x_1 \in [-0.6, 1.5]$ and $x_2 \in [-2, 8]$

B. $x \in [1.4, 4.3]$

C. $x \in [-2.4, -0.3]$

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

E. $x_1 \in [-2.4, -0.3]$ and $x_2 \in [-2, 8]$

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

$$\sqrt{-5x - 4} - \sqrt{5x - 5} = 0$$

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

B. $x \in [-0.92, -0.88]$

C. $x_1 \in [-0.84, -0.72]$ and $x_2 \in [-2.1, 0.4]$

D. $x \in [0.09, 0.13]$

E. $x_1 \in [-0.84, -0.72]$ and $x_2 \in [0.2, 3.3]$

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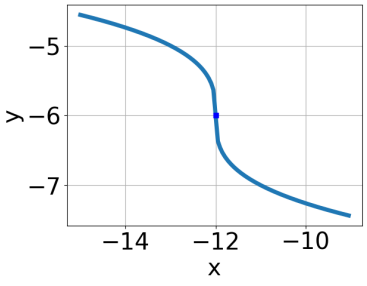
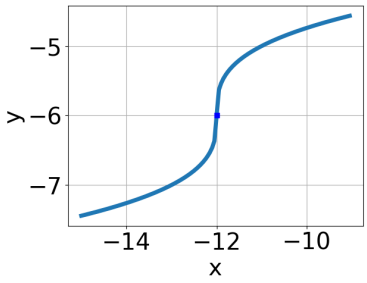
3. Choose the graph of the equation below.

$$f(x) = -\sqrt[3]{x - 12} - 6$$

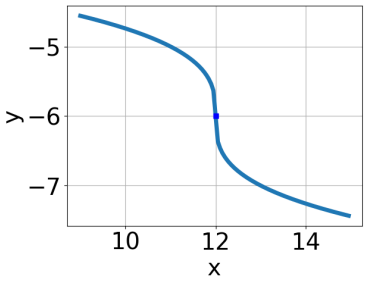
A.



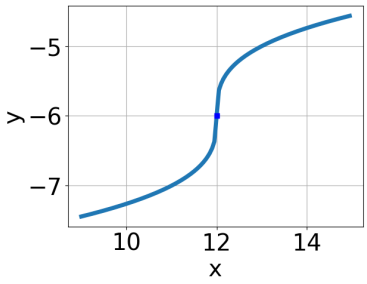
B.



D.



C.



E. None of the above.

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4. What is the domain of the function below?

$$f(x) = \sqrt[4]{8x + 7}$$

A. $[a, \infty)$, where $a \in [-1.55, -1.12]$

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

C. $[a, \infty)$, where $a \in [-1.12, -0.57]$

D. $(-\infty, a]$, where $a \in [-1, 3.5]$

E. $(-\infty, a]$, where $a \in [-2.5, -1]$

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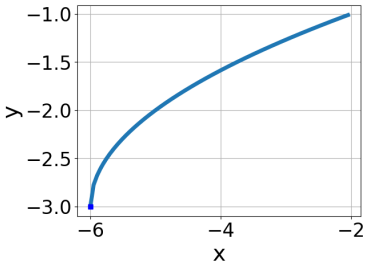
5. Choose the equation of the function graphed below.



A. $f(x) = \sqrt[3]{x-6} - 4$

B. $f(x) = -\sqrt[3]{x+6} - 4$

C. $f(x) = -\sqrt[3]{x-6} - 4$

D. $f(x) = \sqrt[3]{x+6} - 4$

E. None of the above
