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

$$\sqrt{-3x+7} - \sqrt{9x-5} = 0$$

A. $x_1 \in [0.19, 0.87]$ and $x_2 \in [-2, 4]$

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

C. $x_1 \in [0.85, 1.06]$ and $x_2 \in [-2, 4]$

D. $x \in [0.08, 0.19]$

E. $x \in [0.85, 1.06]$

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2. What is the domain of the function below?

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

A. The domain is $[a, \infty)$, where $a \in [-2.1, -0.6]$

B. The domain is $(-\infty, a]$, where $a \in [-1.4, 2.1]$

C. The domain is $[a, \infty)$, where $a \in [-1.1, 2.2]$

D. The domain is $(-\infty, a]$, where $a \in [-2.7, -1.8]$

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

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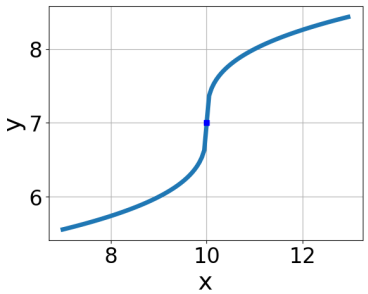
3. Choose the equation of the function graphed below.



A. $f(x) = \sqrt[3]{x-8} + 5$

B. $f(x) = -\sqrt[3]{x-8} + 5$

C. $f(x) = -\sqrt[3]{x+8} + 5$

D. $f(x) = \sqrt[3]{x+8} + 5$

E. None of the above

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

$$\sqrt{-56x^2 + 15} - \sqrt{-19x} = 0$$

A. $x \in [-0.75, 0.18]$

B. $x_1 \in [-0.75, 0.18]$ and $x_2 \in [-1, 2]$

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

D. $x \in [0.45, 1.07]$

E. $x_1 \in [0.09, 0.59]$ and $x_2 \in [-1, 2]$

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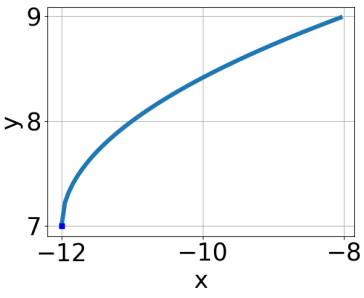
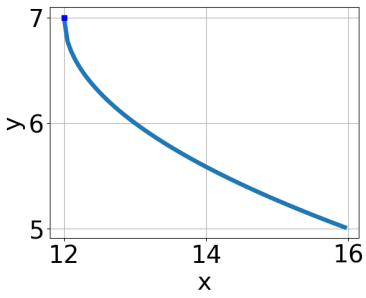
5. Choose the graph of the equation below.

$$f(x) = -\sqrt{x - 12} + 7$$

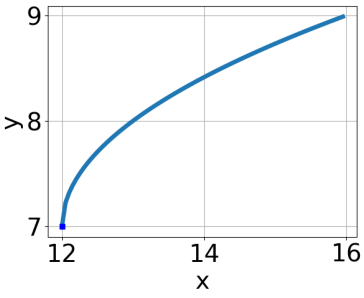
A.



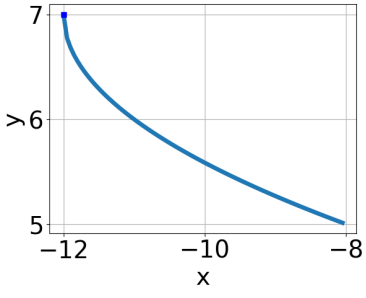
C.



B.



D.



E. None of the above.
