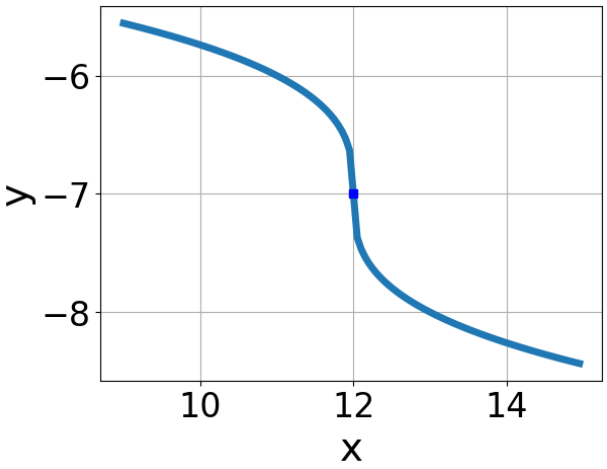
1. Choose the equation of the function graphed below.



A. $f(x) = -\sqrt[3]{x-12} - 7$

B. $f(x) = \sqrt[3]{x+12} - 7$

C. $f(x) = -\sqrt[3]{x+12} - 7$

D. $f(x) = \sqrt[3]{x-12} - 7$

E. None of the above

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

$$\sqrt{-24x^2 - 8} - \sqrt{28x} = 0$$

A. $x \in [-0.89, -0.63]$

B. $x_1 \in [0.5, 0.79]$ and $x_2 \in [0.39, 1.01]$

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

D. $x_1 \in [-0.89, -0.63]$ and $x_2 \in [-1.13, 0.28]$

E. $x \in [-0.61, -0.4]$

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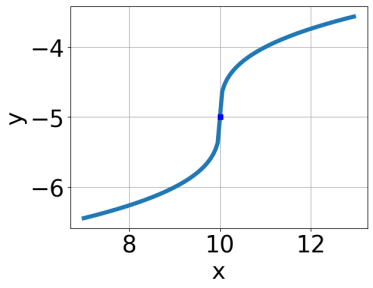
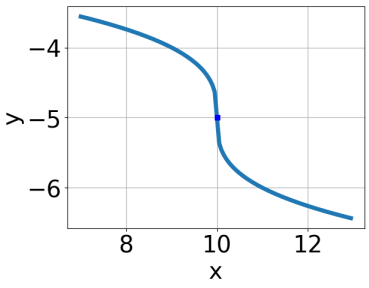
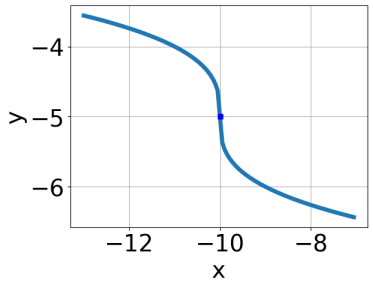
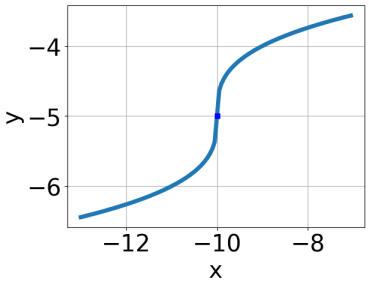
3. Choose the graph of the equation below.

$$f(x) = \sqrt[3]{x+10} - 5$$

A.


C.


B.


D.


E. None of the above.

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4. What is the domain of the function below?

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

A. $[a, \infty)$, where $a \in [0.21, 0.97]$

B. $[a, \infty)$, where $a \in [1.08, 1.89]$

C. $(-\infty, a]$, where $a \in [0.85, 1.03]$

D. $(-\infty, a]$, where $a \in [0.88, 1.18]$

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

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

$$\sqrt{-4x-9} - \sqrt{6x+3} = 0$$

A. $x_1 \in [-2.39, -2.21]$ and $x_2 \in [-1, 0.15]$

B. $x \in [-0.85, -0.06]$

C. $x_1 \in [-2.39, -2.21]$ and $x_2 \in [-2.64, -0.97]$

D. $x \in [-1.37, -1]$

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