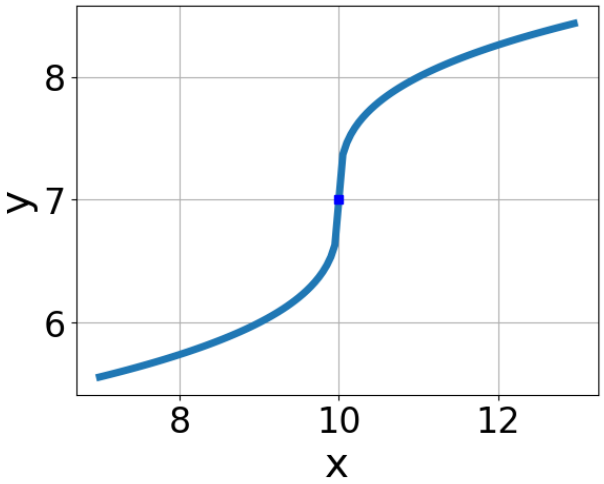
1. Choose the equation of the function graphed below.



A. $f(x) = \sqrt{x+8} + 6$

B. $f(x) = \sqrt{x-8} + 6$

C. $f(x) = -\sqrt{x+8} + 6$

D. $f(x) = -\sqrt{x-8} + 6$

E. None of the above

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2. What is the domain of the function below?

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

A. The domain is $(-\infty, a]$, where $a \in [0.67, 3.1]$

B. The domain is $[a, \infty)$, where $a \in [0.3, 0.7]$

C. The domain is $[a, \infty)$, where $a \in [1.5, 3]$

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

E. The domain is $(-\infty, a]$, where $a \in [-1.1, 0.86]$

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

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

A. $x_1 \in [-3.5, 0.5]$ and $x_2 \in [-3, 2]$

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

C. $x_1 \in [-3.5, 0.5]$ and $x_2 \in [3, 6]$

D. $x \in [3.7, 4.2]$

E. $x \in [0.5, 1.5]$

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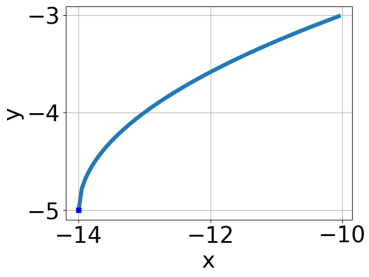
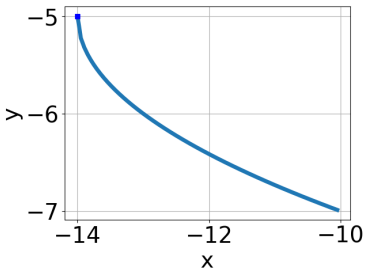
4. Choose the graph of the equation below.

$$f(x) = -\sqrt{x-14} - 5$$

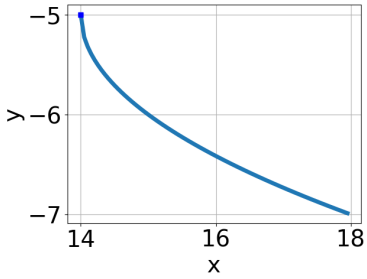
A.



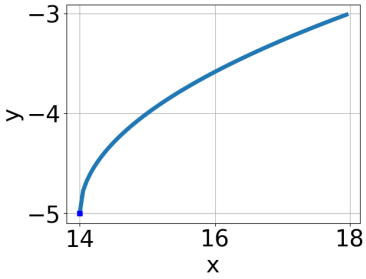
C.



B.



D.



E. None of the above.

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

$$\sqrt{-40x^2+56} - \sqrt{-29x} = 0$$

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

B. $x_1 \in [0.72, 1.05]$ and $x_2 \in [0, 5]$

C. $x \in [-1.21, -0.39]$

D. $x_1 \in [-1.21, -0.39]$ and $x_2 \in [0, 5]$

E. $x \in [1.07, 1.68]$
