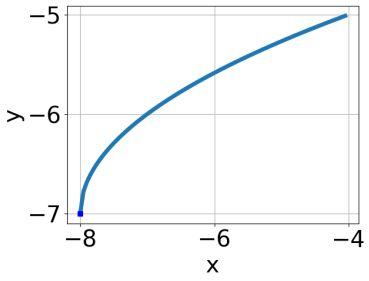
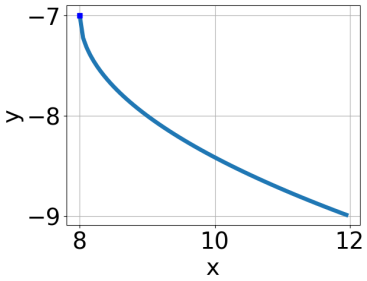
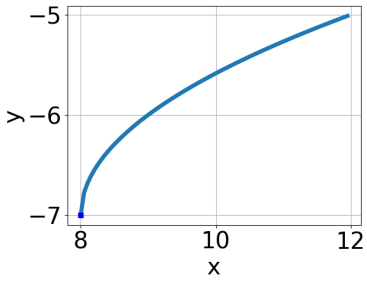
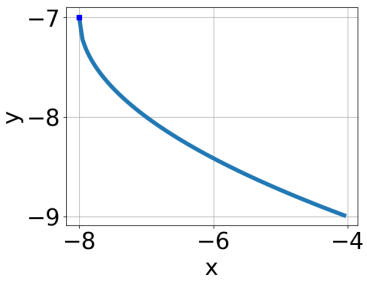
1. Choose the graph of the equation below.

$$f(x) = -\sqrt{x-8} - 7$$

A.


C.


B.


D.


E. None of the above.

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2. What is the domain of the function below?

$$f(x) = \sqrt[3]{8x-3}$$

A. The domain is $[a, \infty)$, where $a \in [2, 7]$

B. The domain is $[a, \infty)$, where $a \in [-2, 1]$

C. The domain is $(-\infty, a]$, where $a \in [-1.3, 0.7]$

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

E. The domain is $(-\infty, a]$, where $a \in [2.1, 5]$

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

$$\sqrt{48x^2 + 35} - \sqrt{-86x} = 0$$

A. $x_1 \in [0.31, 1.16]$ and $x_2 \in [0.8, 1.3]$

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

C. $x \in [-0.95, 0.06]$

D. $x \in [-1.3, -0.86]$

E. $x_1 \in [-1.3, -0.86]$ and $x_2 \in [-2.9, 0.8]$

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

$$\sqrt{-5x + 5} - \sqrt{4x + 8} = 0$$

A. $x_1 \in [-0.6, 0.9]$ and $x_2 \in [-4, 8]$

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

C. $x \in [-0.6, 0.9]$

D. $x_1 \in [-3.1, -0.5]$ and $x_2 \in [-4, 8]$

E. $x \in [0.6, 4.3]$

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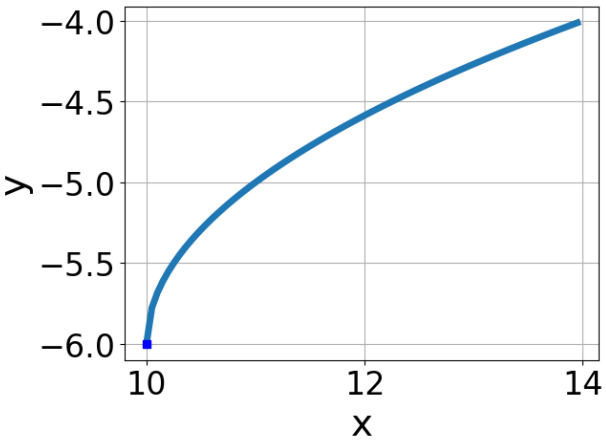
5. Choose the equation of the function graphed below.



A. $f(x) = -\sqrt{x-10} - 6$

B. $f(x) = \sqrt{x-10} - 6$

C. $f(x) = \sqrt{x+10} - 6$

D. $f(x) = -\sqrt{x+10} - 6$

E. None of the above
