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

$$\sqrt{-18x^2 + 12} - \sqrt{19x} = 0$$

A. $x \in [-2.5, -0.5]$

B. $x_1 \in [-2.5, -0.5]$ and $x_2 \in [-3.56, 1.44]$

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

D. $x \in [0.44, 5.44]$

E. $x_1 \in [0.44, 5.44]$ and $x_2 \in [0.5, 3.5]$

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2. What is the domain of the function below?

$$f(x) = \sqrt[6]{5x + 6}$$

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

B. $(-\infty, a]$, where $a \in [-1.48, -0.94]$

C. $(-\infty, a]$, where $a \in [-0.85, -0.42]$

D. $[a, \infty)$, where $a \in [-1.16, 0.5]$

E. $[a, \infty)$, where $a \in [-1.28, -1.07]$

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

$$\sqrt{7x + 5} - \sqrt{-7x - 4} = 0$$

A. $x \in [-0.68, -0.63]$

B. $x_1 \in [-0.75, -0.66]$ and $x_2 \in [-0.62, -0.55]$

C. $x_1 \in [-0.75, -0.66]$ and $x_2 \in [-1.03, -0.62]$

D. $x \in [-0.08, -0.03]$

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

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

$$\sqrt{-3x+7} - \sqrt{-4x+7} = 0$$

A. $x_1 \in [1.64, 2.48]$ and $x_2 \in [1.33, 8.33]$

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

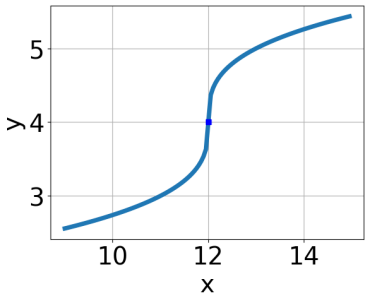
C. $x_1 \in [-0.93, 0.52]$ and $x_2 \in [1.33, 8.33]$

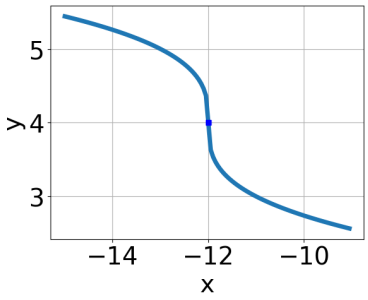
D. $x \in [-0.93, 0.52]$

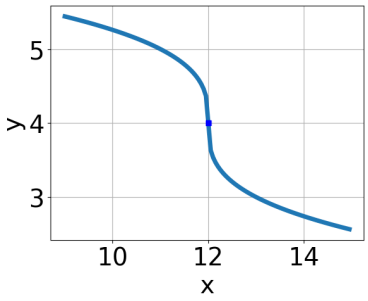
E. $x \in [-14.47, -12.58]$

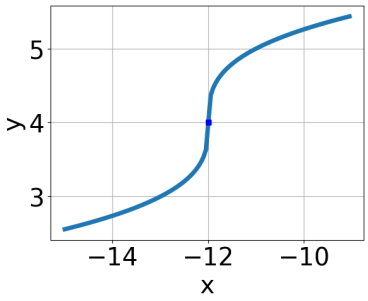
5. Choose the graph of the equation below.

$$f(x) = -\sqrt[3]{x-12} + 4$$

A.


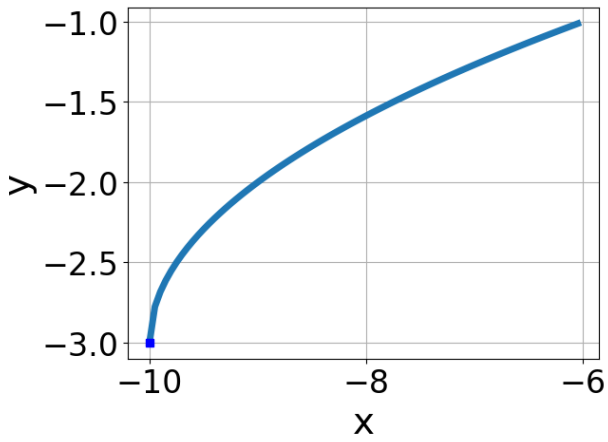
C.


B.


D.


E. None of the above.

6. Choose the equation of the function graphed below.



A. $f(x) = -\sqrt[3]{x-10} - 3$

B. $f(x) = \sqrt[3]{x-10} - 3$

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

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

E. None of the above

---

7. What is the domain of the function below?

$$f(x) = \sqrt[6]{-9x+8}$$

A. $[a, \infty)$, where $a \in [0.96, 1.53]$

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

C. $(-\infty, a]$, where $a \in [0.63, 1.02]$

D. $(-\infty, a]$, where $a \in [1.05, 1.58]$

E. $[a, \infty)$, where $a \in [0.81, 0.98]$

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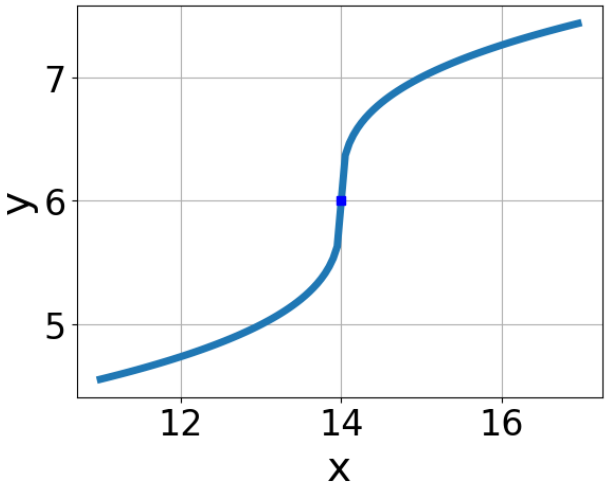
8. Choose the equation of the function graphed below.



A. $f(x) = -\sqrt{x+14}+6$

B. $f(x) = -\sqrt{x-14}+6$

C. $f(x) = \sqrt{x+14}+6$

D. $f(x) = \sqrt{x-14}+6$

E. None of the above

---

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

$$\sqrt{-21x^2-24}-\sqrt{-54x}=0$$

A. $x \in [0.7, 3.8]$

B. $x \in [-0.5, 1.6]$

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

D. $x_1 \in [-1, 0]$ and $x_2 \in [-3, 1]$

E. $x_1 \in [-0.5, 1.6]$ and $x_2 \in [-2, 8]$

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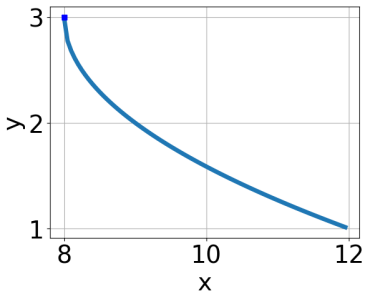
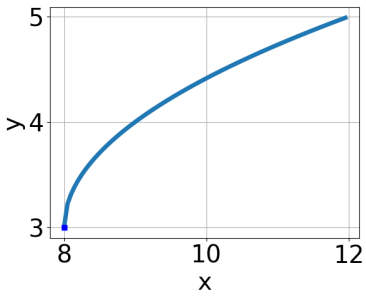
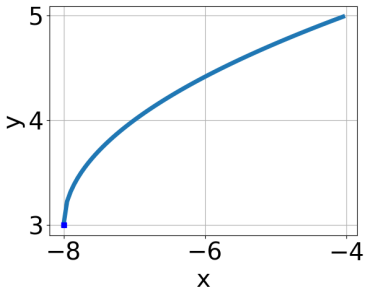
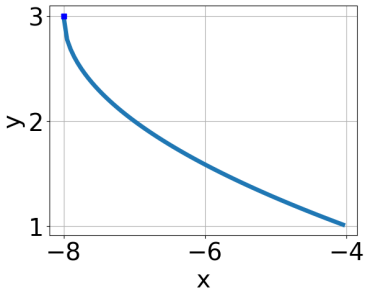
10. Choose the graph of the equation below.

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

A. 

C. 

B. 

D. 

E. None of the above.
