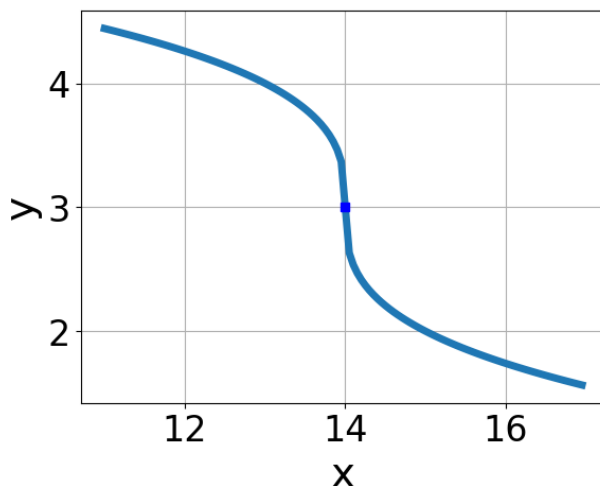


1. Solve the radical equation below. Then, choose the interval(s) that the solution(s) belongs to.

$$\sqrt{30x^2 + 81} - \sqrt{-99x} = 0$$

- A. $x_1 \in [-2.32, -1.77]$ and $x_2 \in [-4.5, -0.5]$
B. $x \in [-2.32, -1.77]$
C. $x_1 \in [1.41, 1.67]$ and $x_2 \in [-0.2, 3.8]$
D. All solutions lead to invalid or complex values in the equation.
E. $x \in [-1.78, -1.24]$
-

2. Choose the equation of the function graphed below.



- A. $f(x) = \sqrt[3]{x-14} + 3$
B. $f(x) = \sqrt[3]{x+14} + 3$
C. $f(x) = -\sqrt[3]{x-14} + 3$
D. $f(x) = -\sqrt[3]{x+14} + 3$
E. None of the above
-

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

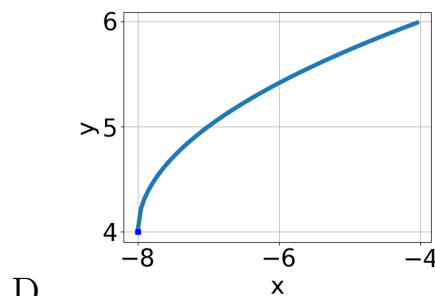
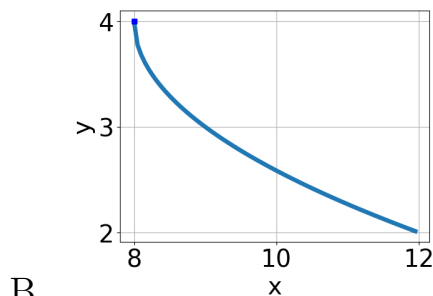
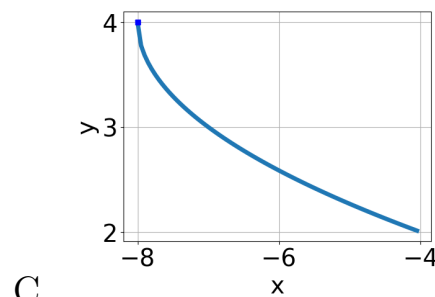
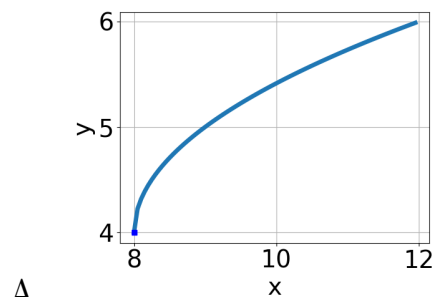
solution(s) belongs to.

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

- A. $x_1 \in [1.4, 3.4]$ and $x_2 \in [1.7, 3]$
- B. $x_1 \in [-3.67, 0.33]$ and $x_2 \in [0.1, 2.4]$
- C. All solutions lead to invalid or complex values in the equation.
- D. $x \in [1.4, 3.4]$
- E. $x \in [-3.67, 0.33]$

4. Choose the graph of the equation below.

$$f(x) = \sqrt{x+8} + 4$$



E. None of the above.

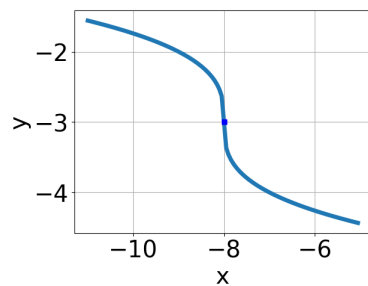
5. Solve the radical equation below. Then, choose the interval(s) that the solution(s) belongs to.

$$\sqrt{6x-9} - \sqrt{7x+8} = 0$$

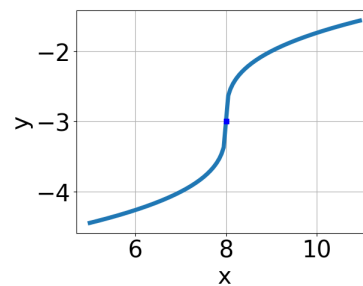
- A. $x_1 \in [-17.6, -16.75]$ and $x_2 \in [-0.5, 5.5]$
- B. $x \in [-17.6, -16.75]$
- C. All solutions lead to invalid or complex values in the equation.
- D. $x_1 \in [-1.75, -1.08]$ and $x_2 \in [-0.5, 5.5]$
- E. $x \in [-1.12, -0.97]$

6. Choose the graph of the equation below.

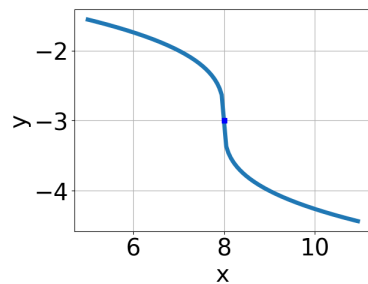
$$f(x) = \sqrt[3]{x - 8} - 3$$



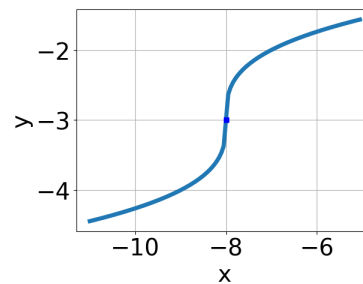
A.



C.



B.



D.

E. None of the above.

7. What is the domain of the function below?

$$f(x) = \sqrt[4]{-6x + 8}$$

- A. $(-\infty, a]$, where $a \in [-0.15, 1]$
- B. $(-\infty, a]$, where $a \in [1.16, 1.39]$
- C. $[a, \infty)$, where $a \in [1.1, 1.9]$

D. $[a, \infty)$, where $a \in [-1.1, 1]$

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

8. What is the domain of the function below?

$$f(x) = \sqrt[8]{4x - 5}$$

A. $[a, \infty)$, where $a \in [0.09, 0.96]$

B. $(-\infty, a]$, where $a \in [1.19, 1.38]$

C. $(-\infty, a]$, where $a \in [0.71, 1.24]$

D. $[a, \infty)$, where $a \in [1.19, 1.28]$

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

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

$$\sqrt{4x - 7} - \sqrt{7x - 6} = 0$$

A. $x \in [-1.4, 0.3]$

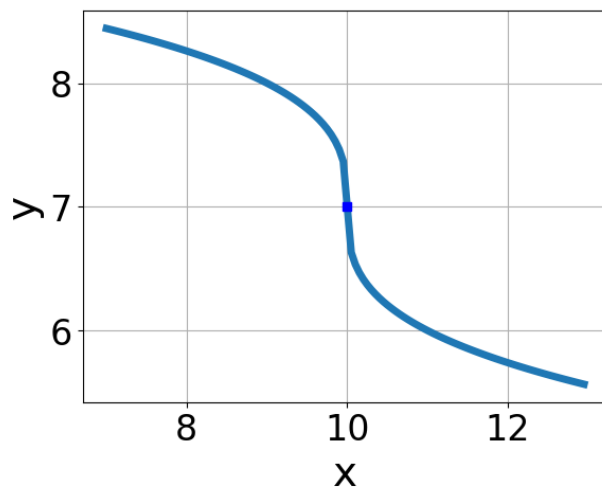
B. $x_1 \in [-1.4, 0.3]$ and $x_2 \in [0.75, 6.75]$

C. $x \in [-4.8, -3.6]$

D. $x_1 \in [0.5, 1.6]$ and $x_2 \in [0.75, 6.75]$

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

10. Choose the equation of the function graphed below.



- A. $f(x) = \sqrt[3]{x+10} + 7$
- B. $f(x) = -\sqrt[3]{x+10} + 7$
- C. $f(x) = \sqrt[3]{x-10} + 7$
- D. $f(x) = -\sqrt[3]{x-10} + 7$
- E. None of the above