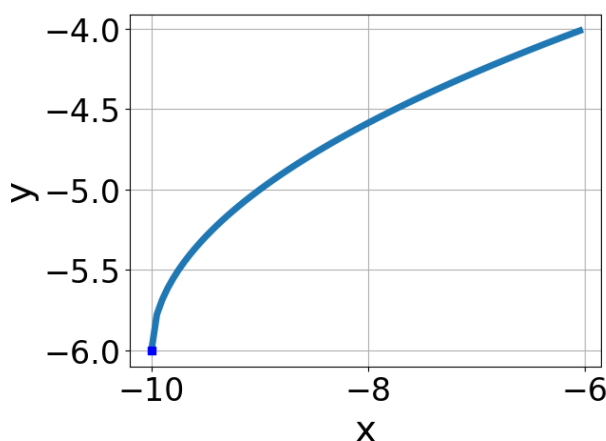


1. Solve the radical equation below. Then, choose the interval(s) that the solution(s) belongs to.

$$\sqrt{20x^2 + 21} - \sqrt{-43x} = 0$$

- A. $x \in [-1.1, -0.29]$
B. $x_1 \in [-2.13, -0.84]$ and $x_2 \in [-1.75, 0.25]$
C. $x \in [-2.13, -0.84]$
D. $x_1 \in [-0.61, 1.35]$ and $x_2 \in [-0.6, 2.4]$
E. All solutions lead to invalid or complex values in the equation.
-

2. Choose the equation of the function graphed below.



- A. $f(x) = -\sqrt[3]{x+10} - 6$
B. $f(x) = -\sqrt[3]{x-10} - 6$
C. $f(x) = \sqrt[3]{x+10} - 6$
D. $f(x) = \sqrt[3]{x-10} - 6$
E. None of the above
-

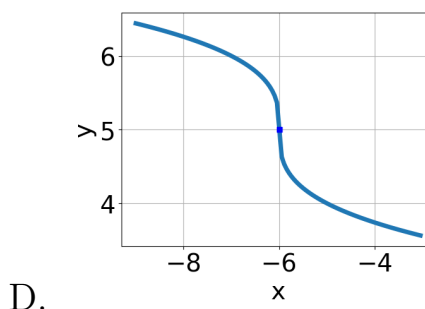
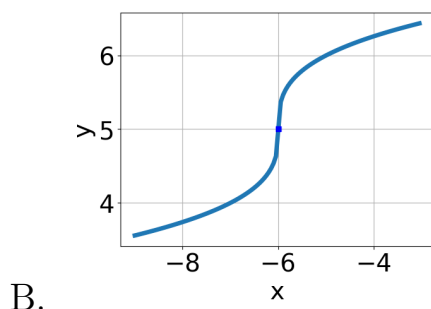
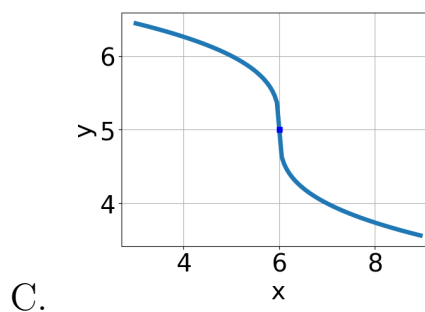
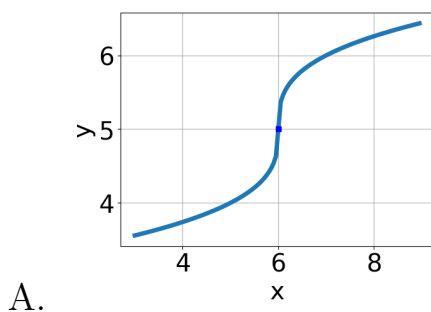
3. Solve the radical equation below. Then, choose the interval(s) that the solution(s) belongs to.

$$\sqrt{-40x^2 - 42} - \sqrt{86x} = 0$$

- A. $x \in [-1.24, -0.65]$
- B. All solutions lead to invalid or complex values in the equation.
- C. $x_1 \in [1.05, 1.72]$ and $x_2 \in [0.2, 1.8]$
- D. $x_1 \in [-2.24, -1.3]$ and $x_2 \in [-2.8, -0.5]$
- E. $x \in [-2.24, -1.3]$

4. Choose the graph of the equation below.

$$f(x) = -\sqrt[3]{x-6} + 5$$



E. None of the above.

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

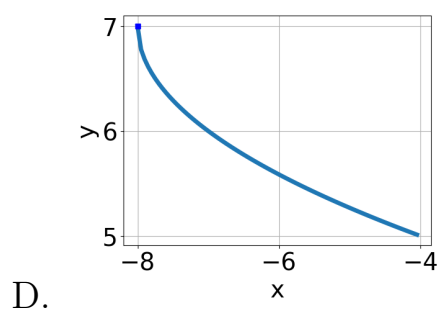
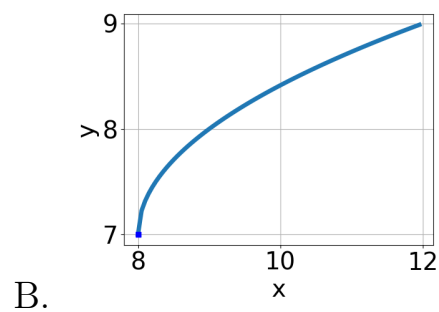
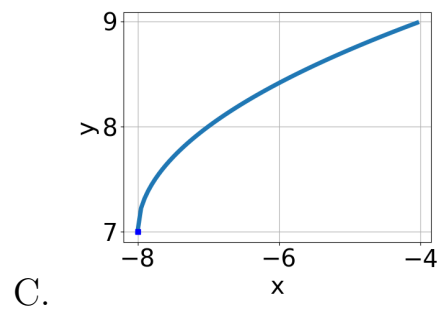
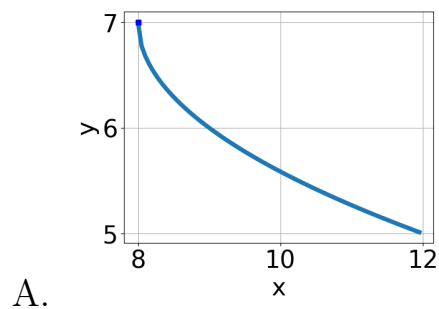
$$\sqrt{3x-9} - \sqrt{-9x-5} = 0$$

- A. All solutions lead to invalid or complex values in the equation.
- B. $x_1 \in [-0.5, 0.5]$ and $x_2 \in [3, 8]$

- C. $x \in [0.7, 1.6]$
 D. $x \in [-0.5, 0.5]$
 E. $x_1 \in [-1.8, -0.1]$ and $x_2 \in [3, 8]$

6. Choose the graph of the equation below.

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



E. None of the above.

7. What is the domain of the function below?

$$f(x) = \sqrt[3]{-4x - 6}$$

- A. The domain is $[a, \infty)$, where $a \in [-1.62, -1.35]$
 B. The domain is $(-\infty, a]$, where $a \in [-1.47, 1.22]$
 C. The domain is $(-\infty, a]$, where $a \in [-2.77, -1.25]$
 D. $(-\infty, \infty)$
 E. The domain is $[a, \infty)$, where $a \in [-1.42, -0.32]$

8. What is the domain of the function below?

$$f(x) = \sqrt[3]{-5x - 6}$$

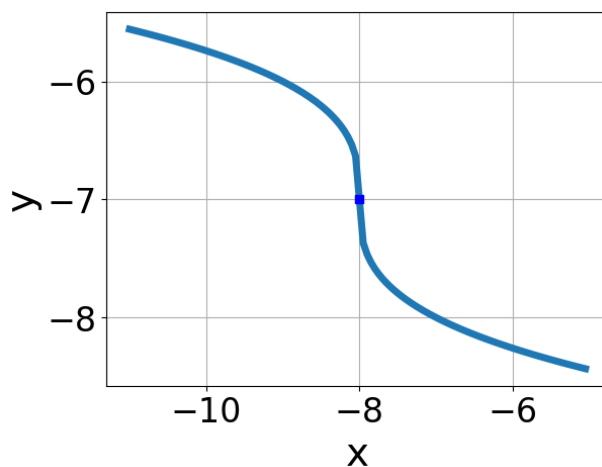
- A. The domain is $(-\infty, a]$, where $a \in [-1.03, -0.56]$
 - B. $(-\infty, \infty)$
 - C. The domain is $[a, \infty)$, where $a \in [-1.78, -1.09]$
 - D. The domain is $(-\infty, a]$, where $a \in [-1.85, -1.04]$
 - E. The domain is $[a, \infty)$, where $a \in [-1.11, -0.33]$
-

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

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

- A. $x_1 \in [-1.88, -1.13]$ and $x_2 \in [-1.8, 4.2]$
 - B. $x \in [-1.27, -0.29]$
 - C. $x_1 \in [-1.27, -0.29]$ and $x_2 \in [-1.8, 4.2]$
 - D. $x \in [-0.12, 1.21]$
 - E. All solutions lead to invalid or complex values in the equation.
-

10. Choose the equation of the function graphed below.



- A. $f(x) = -\sqrt[3]{x-8} - 7$
- B. $f(x) = -\sqrt[3]{x+8} - 7$
- C. $f(x) = \sqrt[3]{x-8} - 7$
- D. $f(x) = \sqrt[3]{x+8} - 7$
- E. None of the above