

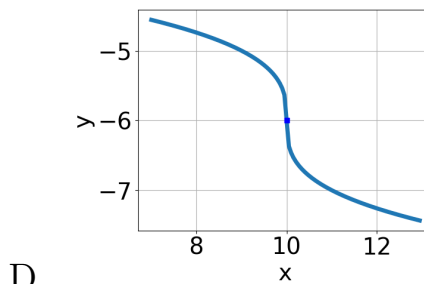
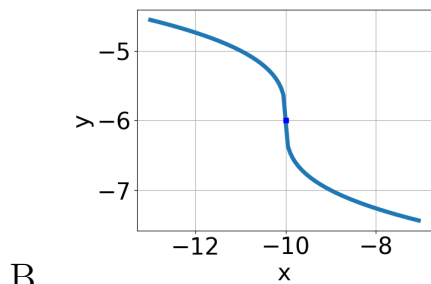
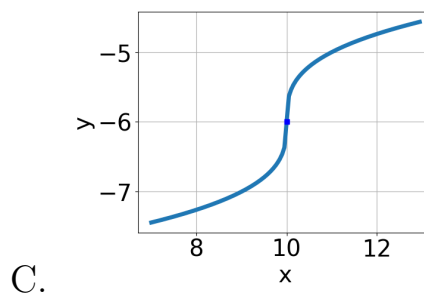
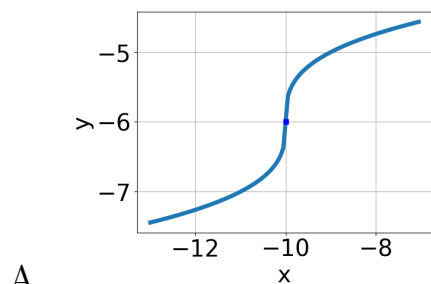
1. What is the domain of the function below?

$$f(x) = \sqrt[6]{-9x - 7}$$

- A. $(-\infty, \infty)$
B. $(-\infty, a]$, where $a \in [-1.62, -0.97]$
C. $(-\infty, a]$, where $a \in [-0.93, -0.54]$
D. $[a, \infty)$, where $a \in [-0.86, -0.7]$
E. $[a, \infty)$, where $a \in [-1.62, -1.09]$
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2. Choose the graph of the equation below.

$$f(x) = -\sqrt[3]{x + 10} - 6$$



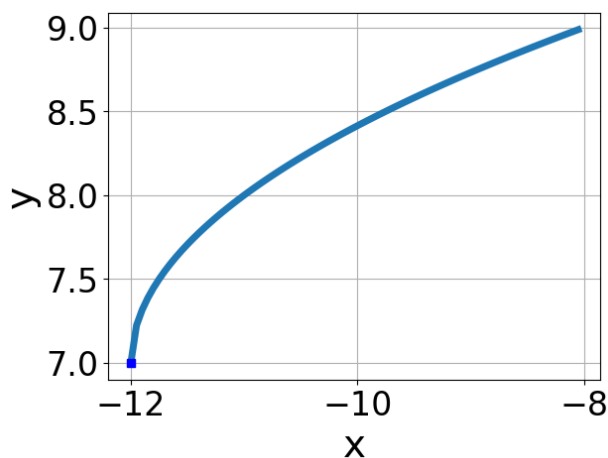
- E. None of the above.
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3. Solve the radical equation below. Then, choose the interval(s) that the solution(s) belongs to.

$$\sqrt{-10x^2 - 35} - \sqrt{39x} = 0$$

- A. $x_1 \in [1.9, 3]$ and $x_2 \in [-0.2, 2.9]$
- B. $x \in [-2.32, -0.64]$
- C. All solutions lead to invalid or complex values in the equation.
- D. $x_1 \in [-2.57, -1.84]$ and $x_2 \in [-2, -0.2]$
- E. $x \in [-2.57, -1.84]$

4. Choose the equation of the function graphed below.



- A. $f(x) = \sqrt[3]{x - 12} + 4$
- B. $f(x) = \sqrt[3]{x + 12} + 4$
- C. $f(x) = -\sqrt[3]{x + 12} + 4$
- D. $f(x) = -\sqrt[3]{x - 12} + 4$
- E. None of the above

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

$$\sqrt{-8x + 4} - \sqrt{-9x - 5} = 0$$

- A. All solutions lead to invalid or complex values in the equation.
 - B. $x \in [-9.4, -8.9]$
 - C. $x \in [0.9, 3.1]$
 - D. $x_1 \in [-0.9, -0.5]$ and $x_2 \in [-1, 3]$
 - E. $x_1 \in [-9.4, -8.9]$ and $x_2 \in [-1, 3]$
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