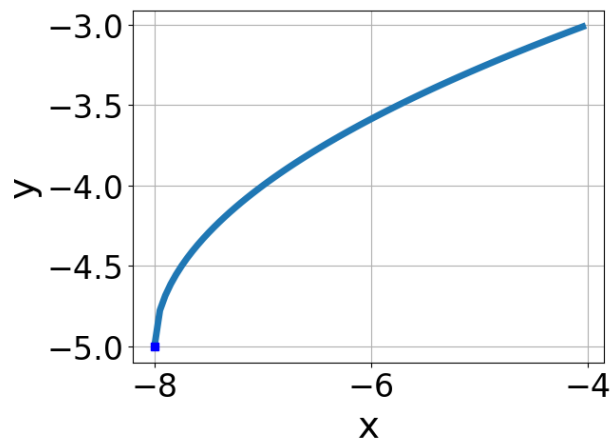
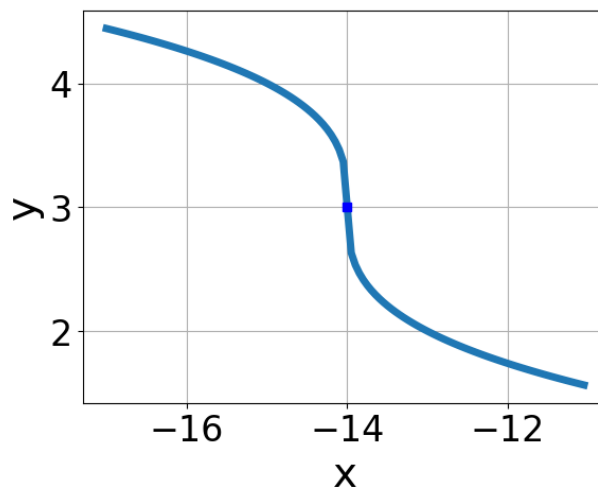


1. Choose the equation of the function graphed below.



- A.  $f(x) = -\sqrt[3]{x+8} - 5$   
B.  $f(x) = \sqrt[3]{x+8} - 5$   
C.  $f(x) = \sqrt[3]{x-8} - 5$   
D.  $f(x) = -\sqrt[3]{x-8} - 5$   
E. None of the above

- 
2. Choose the equation of the function graphed below.



- A.  $f(x) = -\sqrt{x+14} + 3$   
B.  $f(x) = \sqrt{x-14} + 3$

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

3. What is the domain of the function below?

$$f(x) = \sqrt[5]{9x-7}$$

- A.  $(-\infty, \infty)$
  - B. The domain is  $[a, \infty)$ , where  $a \in [0.54, 1.21]$
  - C. The domain is  $(-\infty, a]$ , where  $a \in [0.99, 1.68]$
  - D. The domain is  $[a, \infty)$ , where  $a \in [0.92, 1.89]$
  - E. The domain is  $(-\infty, a]$ , where  $a \in [0.38, 0.83]$
- 

4. What is the domain of the function below?

$$f(x) = \sqrt[3]{-5x+7}$$

- A. The domain is  $[a, \infty)$ , where  $a \in [-0.29, 0.86]$
  - B. The domain is  $(-\infty, a]$ , where  $a \in [0.45, 0.94]$
  - C.  $(-\infty, \infty)$
  - D. The domain is  $[a, \infty)$ , where  $a \in [1.24, 1.63]$
  - E. The domain is  $(-\infty, a]$ , where  $a \in [0.79, 1.94]$
- 

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

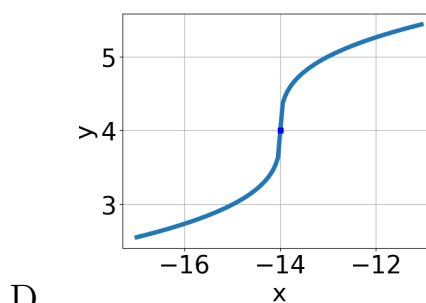
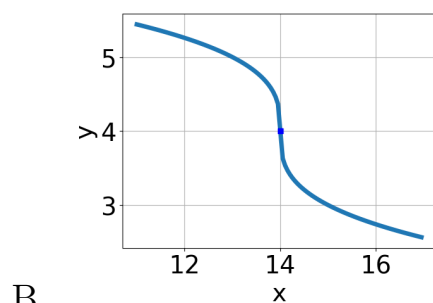
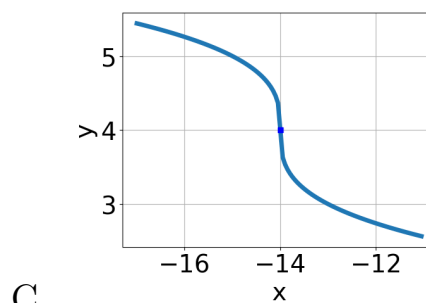
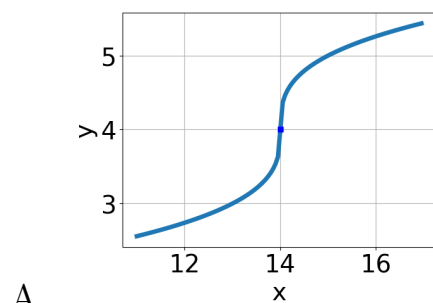
$$\sqrt{-7x+5} - \sqrt{7x+6} = 0$$

- A.  $x \in [-0.41, 0.08]$
- B.  $x_1 \in [-0.41, 0.08]$  and  $x_2 \in [-2.29, 2.71]$

- C.  $x \in [0.33, 1.32]$
- D.  $x_1 \in [-0.88, -0.71]$  and  $x_2 \in [-2.29, 2.71]$
- E. All solutions lead to invalid or complex values in the equation.

6. Choose the graph of the equation below.

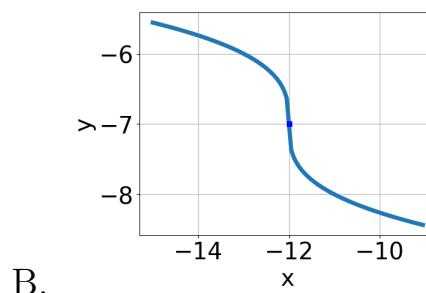
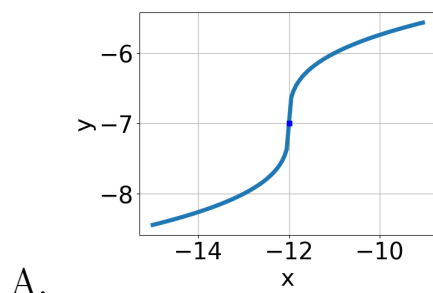
$$f(x) = -\sqrt[3]{x+14} + 4$$

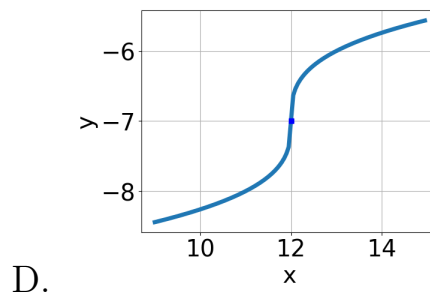
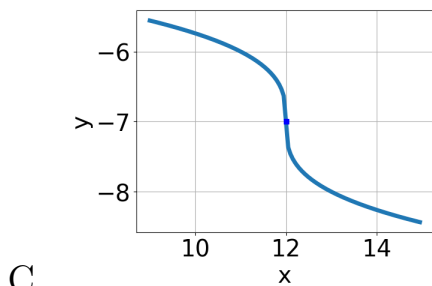


E. None of the above.

7. Choose the graph of the equation below.

$$f(x) = -\sqrt[3]{x+12} - 7$$





E. None of the above.

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

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

- A.  $x \in [0.76, 1.1]$
- B.  $x_1 \in [-4.14, -2.2]$  and  $x_2 \in [-2, 0.6]$
- C.  $x \in [1.6, 3.24]$
- D.  $x_1 \in [-4.14, -2.2]$  and  $x_2 \in [-0.2, 1.6]$
- E. All solutions lead to invalid or complex values in the equation.

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

$$\sqrt{24x^2 - 36} - \sqrt{5x} = 0$$

- A.  $x_1 \in [1, 1.27]$  and  $x_2 \in [1.33, 5.33]$
- B. All solutions lead to invalid or complex values in the equation.
- C.  $x_1 \in [-1.26, -1.08]$  and  $x_2 \in [1.33, 5.33]$
- D.  $x \in [1.3, 1.36]$
- E.  $x \in [-1.26, -1.08]$

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

$$\sqrt{72x^2 + 12} - \sqrt{60x} = 0$$

- A.  $x_1 \in [-0.55, -0.29]$  and  $x_2 \in [-0.42, 0.44]$
  - B.  $x \in [0.32, 0.37]$
  - C.  $x_1 \in [0.32, 0.37]$  and  $x_2 \in [0.35, 1.35]$
  - D.  $x \in [0.49, 0.62]$
  - E. All solutions lead to invalid or complex values in the equation.
-