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

$$\sqrt{35x^2 - 28} - \sqrt{-29x} = 0$$

A. $x \in [-2.1, -0.9]$

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

C. $x_1 \in [-1.2, 1]$ and $x_2 \in [1.38, 1.75]$

D. $x_1 \in [-2.1, -0.9]$ and $x_2 \in [-0.08, 0.79]$

E. $x \in [-1.2, 1]$

---

2. What is the domain of the function below?

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

A. The domain is $(-\infty, a]$, where $a \in [1.3, 4]$

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

C. The domain is $(-\infty, a]$, where $a \in [0.3, 1.5]$

D. The domain is $[a, \infty)$, where $a \in [-0.43, 2.02]$

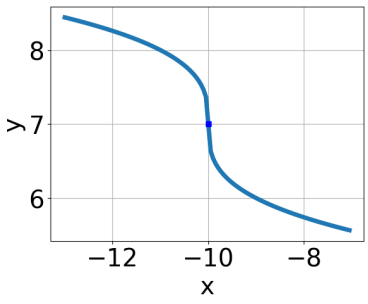
E. The domain is $[a, \infty)$, where $a \in [1.32, 2.45]$

---

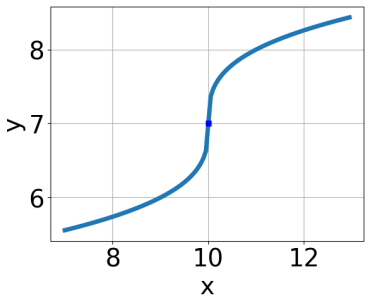
3. Choose the graph of the equation below.

$$f(x) = \sqrt[3]{x - 10} + 7$$

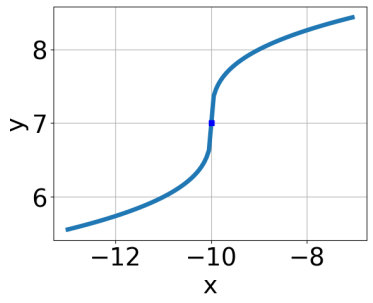
A.



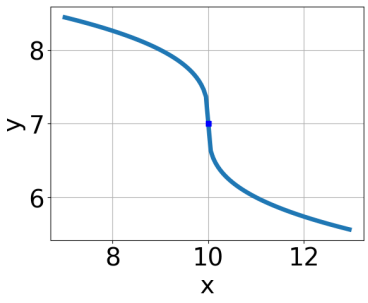
B.



C.



D.



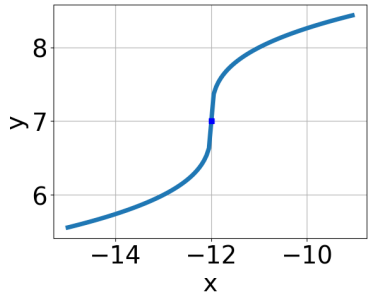
E. None of the above.

---

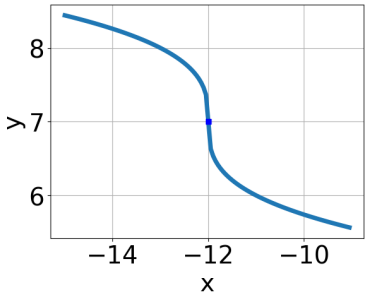
4. Choose the graph of the equation below.

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

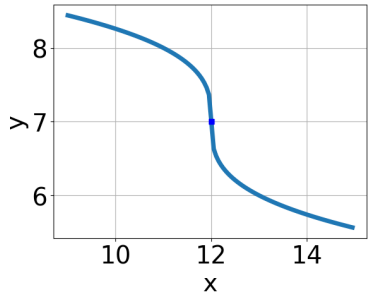
A.



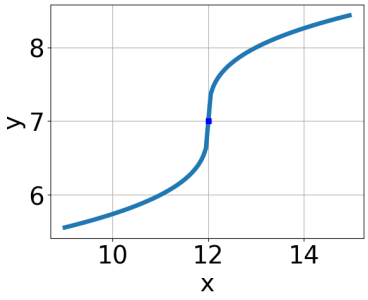
C.



B.



D.



E. None of the above.

---

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

$$\sqrt{72x^2 - 21} - \sqrt{29x} = 0$$

A. $x_1 \in [-0.2, 0.71]$ and $x_2 \in [-1.22, 3.78]$

B. $x \in [0.44, 0.96]$

C. $x \in [-0.7, 0.08]$

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

E. $x_1 \in [-0.7, 0.08]$ and $x_2 \in [-1.22, 3.78]$

---

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

$$\sqrt{-7x+8} - \sqrt{-3x-4} = 0$$

A. $x \in [0.71, 1.13]$

B. $x_1 \in [1.08, 1.62]$ and $x_2 \in [1.6, 4.6]$

C. $x_1 \in [-1.53, -0.79]$ and $x_2 \in [0, 1.6]$

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

E. $x \in [2.73, 3.15]$

---

7. What is the domain of the function below?

$$f(x) = \sqrt[3]{4x+7}$$

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

B. The domain is $(-\infty, a]$, where $a \in [-2.3, -1.18]$

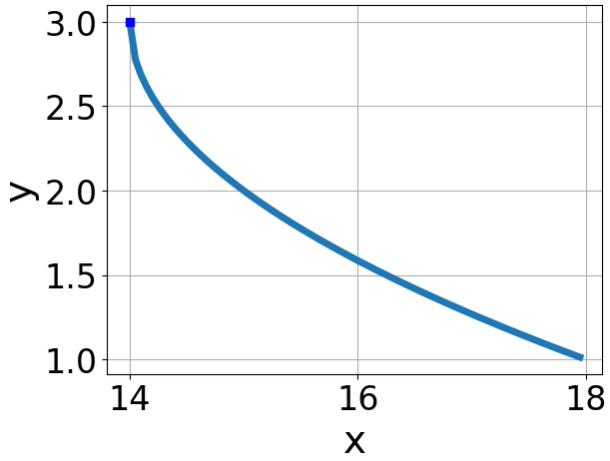
C. The domain is $(-\infty, a]$, where $a \in [-1.58, 0.74]$

D. The domain is $[a, \infty)$, where $a \in [-2.07, -1.73]$

E. The domain is $[a, \infty)$, where $a \in [-1.48, -0.38]$

---

8. Choose the equation of the function graphed below.



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

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

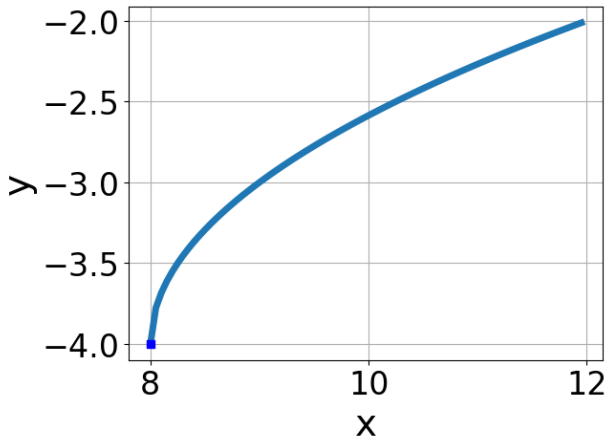
C. $f(x) = \sqrt{x-14}+3$

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

E. None of the above

---

9. Choose the equation of the function graphed below.



A. $f(x) = \sqrt{x-8}-4$

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

C. $f(x) = -\sqrt{x-8}-4$

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

E. None of the above

---

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

$$\sqrt{-9x+2} - \sqrt{-7x-4} = 0$$

A. $x \in [-1.58, -0.64]$

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

C. $x \in [2.37, 3.34]$

D. $x_1 \in [-0.61, -0.19]$ and $x_2 \in [-0.78, 2.22]$

E. $x_1 \in [-0.22, 0.49]$ and $x_2 \in [2, 10]$
