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

$$\sqrt{-6x+3} - \sqrt{4x+9} = 0$$

A. $x_1 \in [-0.7, 0.4]$ and $x_2 \in [-0.5, 4.5]$

B. $x_1 \in [-2.8, -1.8]$ and $x_2 \in [-0.5, 4.5]$

C. $x \in [0.5, 2.2]$

D. $x \in [-0.7, 0.4]$

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

---

2. What is the domain of the function below?

$$f(x) = \sqrt[3]{-8x-5}$$

A. The domain is $(-\infty, a]$, where $a \in [-2.4, -0.78]$

B. The domain is $[a, \infty)$, where $a \in [-2.22, -0.98]$

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

D. The domain is $[a, \infty)$, where $a \in [-0.78, -0.1]$

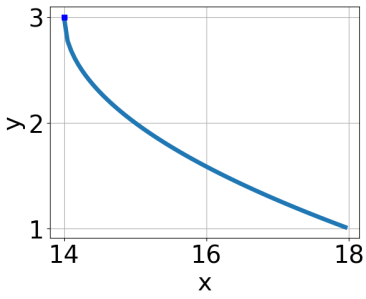
E. The domain is $(-\infty, a]$, where $a \in [-1.13, -0.6]$

---

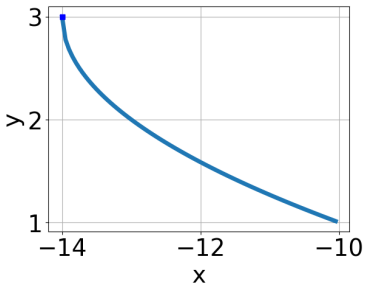
3. Choose the graph of the equation below.

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

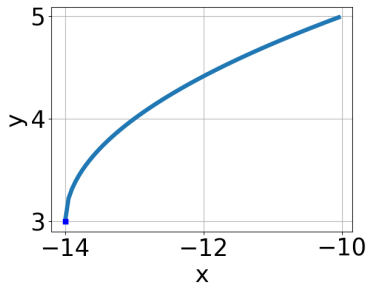
A.



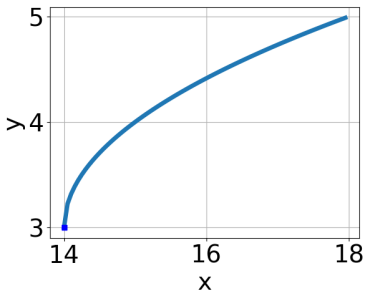
B.



C.



D.



E. None of the above.

---

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

$$\sqrt{-30x^2 - 32} - \sqrt{-64x} = 0$$

A. $x_1 \in [0.49, 1.08]$ and $x_2 \in [-0.67, 3.33]$

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

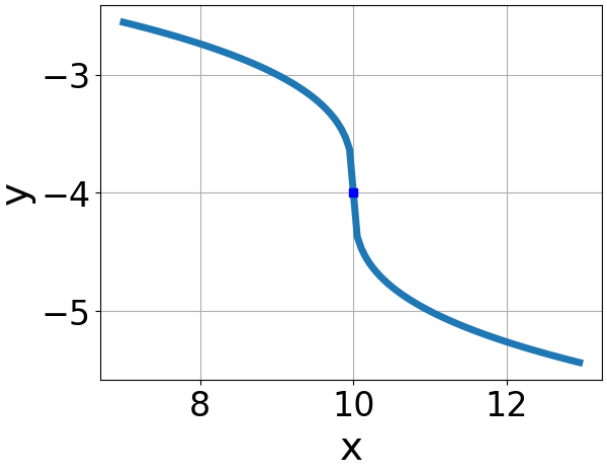
C. $x \in [1.08, 2.63]$

D. $x \in [0.49, 1.08]$

E. $x_1 \in [-2.39, -0.64]$ and $x_2 \in [-2.33, 0.67]$

---

5. Choose the equation of the function graphed below.



A. $f(x) = -\sqrt{x + 10} - 4$

B. $f(x) = \sqrt{x+10} - 4$

C. $f(x) = \sqrt{x-10} - 4$

D. $f(x) = -\sqrt{x-10} - 4$

E. None of the above

---

6. What is the domain of the function below?

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

A. $(-\infty, a]$, where $a \in [-3.4, 1.6]$

B. $[a, \infty)$, where $a \in [1.47, 2.68]$

C. $(-\infty, a]$, where $a \in [0.67, 5.67]$

D. $[a, \infty)$, where $a \in [-0.17, 0.77]$

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

---

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

$$\sqrt{35x^2+15} - \sqrt{50x} = 0$$

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

B. $x \in [0.88, 1.16]$

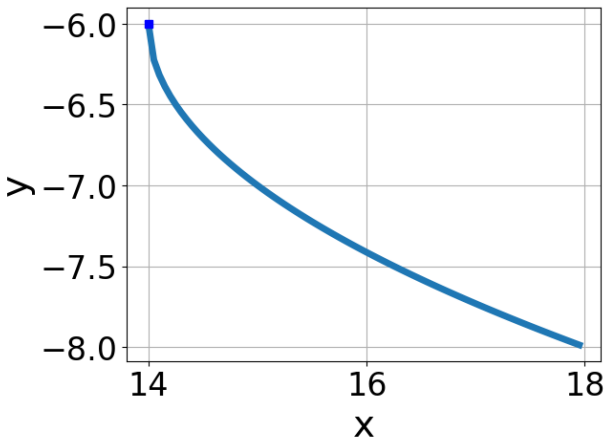
C. $x \in [0.06, 0.85]$

D. $x_1 \in [-1.28, -0.72]$ and $x_2 \in [-2.43, 0.57]$

E. $x_1 \in [0.06, 0.85]$ and $x_2 \in [1, 4]$

---

8. Choose the equation of the function graphed below.



A. $f(x) = \sqrt[3]{x+14} - 6$

B. $f(x) = -\sqrt[3]{x+14} - 6$

C. $f(x) = \sqrt[3]{x-14} - 6$

D. $f(x) = -\sqrt[3]{x-14} - 6$

E. None of the above

---

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

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

A. $x \in [4.44, 4.64]$

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

C. $x_1 \in [0.34, 0.68]$ and $x_2 \in [0.61, 0.72]$

D. $x_1 \in [0.63, 1.12]$ and $x_2 \in [0.72, 0.96]$

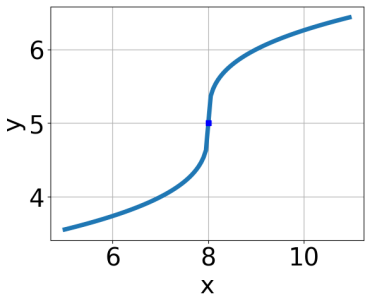
E. $x \in [0.34, 0.68]$

---

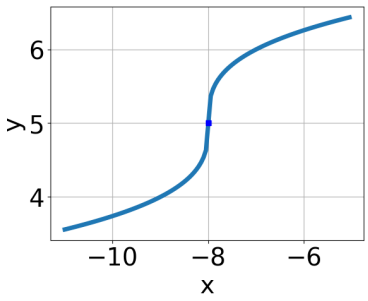
10. Choose the graph of the equation below.

$$f(x) = -\sqrt[3]{x+8} + 5$$

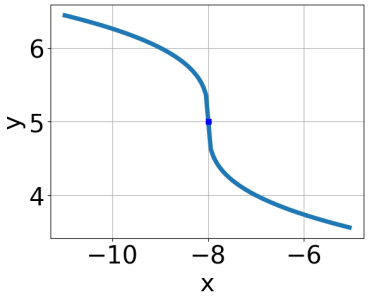
A.



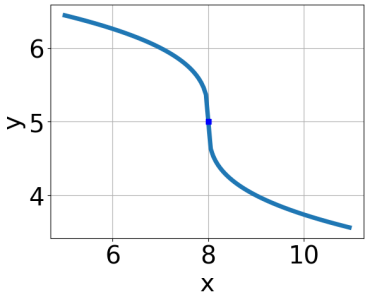
C.



B.



D.



E. None of the above.
