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

$$\sqrt{8x+4} - \sqrt{3x+6} = 0$$

A. $x \in [0.24, 0.53]$

B. $x_1 \in [-3.33, -1.97]$ and $x_2 \in [-1.32, -0.08]$

C. $x \in [-3.33, -1.97]$

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

E. $x_1 \in [-0.84, 0.21]$ and $x_2 \in [-0.15, 0.76]$

---

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

$$\sqrt{-8x^2 - 35} - \sqrt{34x} = 0$$

A. $x \in [-2.3, -1.62]$

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

C. $x_1 \in [-2.76, -2.46]$ and $x_2 \in [-2.75, 1.25]$

D. $x_1 \in [2.19, 3.63]$ and $x_2 \in [0.75, 5.75]$

E. $x \in [-2.76, -2.46]$

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

$$\sqrt{72x^2 + 4} - \sqrt{-34x} = 0$$

A. $x \in [-0.24, -0.21]$

B. $x \in [-0.26, -0.23]$

C. $x_1 \in [0.22, 0.23]$ and $x_2 \in [0.09, 0.68]$

D. $x_1 \in [-0.26, -0.23]$ and $x_2 \in [-0.47, -0.18]$

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

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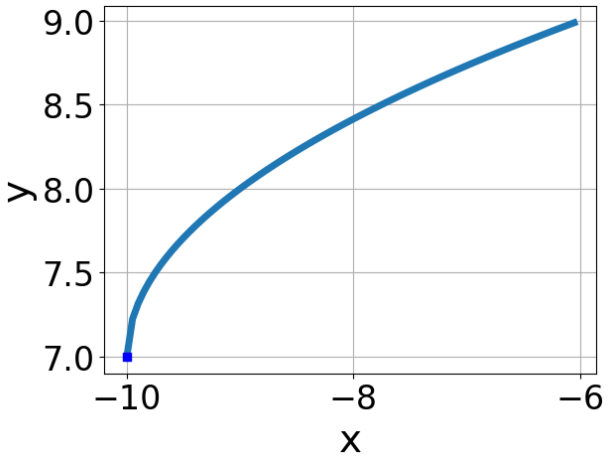
4. Choose the equation of the function graphed below.



A. $f(x) = \sqrt{x+10}+7$

B. $f(x) = -\sqrt{x+10}+7$

C. $f(x) = -\sqrt{x-10}+7$

D. $f(x) = \sqrt{x-10}+7$

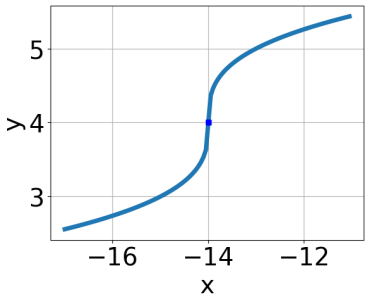
E. None of the above

---

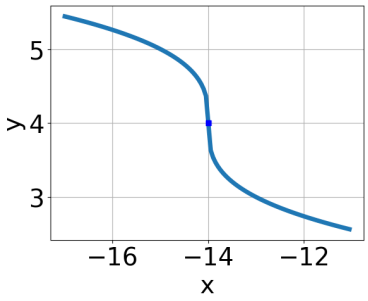
5. Choose the graph of the equation below.

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

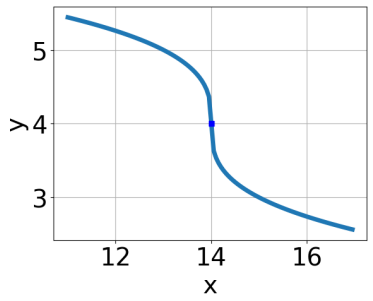
A.



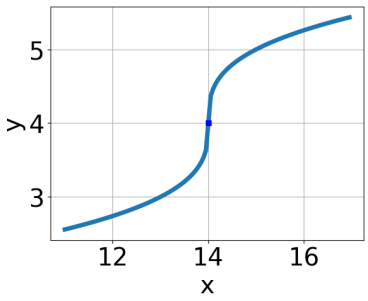
B.



C.



D.



E. None of the above.

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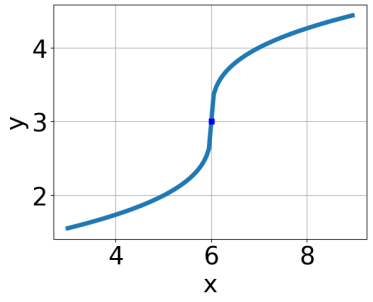
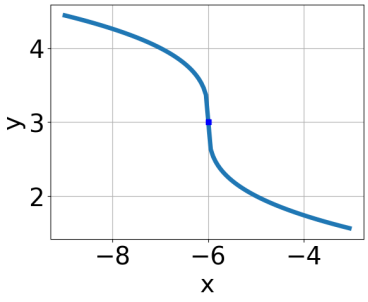
6. Choose the graph of the equation below.

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

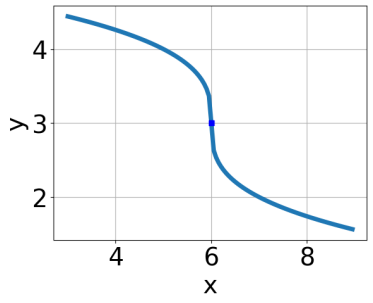
A.



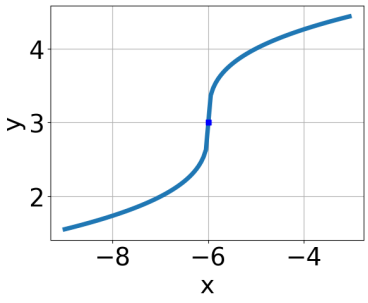
C.



B.



D.



E. None of the above.

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7. What is the domain of the function below?

$$f(x) = \sqrt[4]{-8x-3}$$

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

B. $[a, \infty)$, where $a \in [-1.3, 1.8]$

C. $(-\infty, a]$, where $a \in [-1, 2.7]$

D. $[a, \infty)$, where $a \in [-5, -1.9]$

E. $(-\infty, a]$, where $a \in [-5.4, -1.7]$

---

8. What is the domain of the function below?

$$f(x) = \sqrt[6]{-5x + 4}$$

A. $[a, \infty)$, where $a \in [0.35, 0.85]$

B. $(-\infty, a]$, where $a \in [0.96, 1.36]$

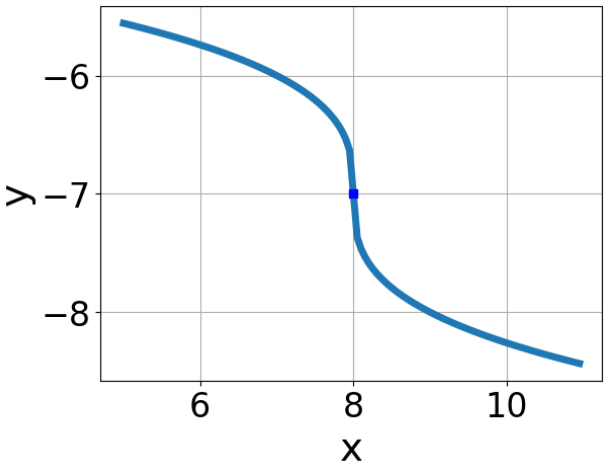
C. $(-\infty, \infty)$

D. $[a, \infty)$, where $a \in [0.9, 1.36]$

E. $(-\infty, a]$, where $a \in [0.25, 0.93]$

---

9. 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

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

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

A. $x \in [-0.75, -0.63]$

B. $x_1 \in [-0.64, -0.57]$ and $x_2 \in [-0.8, 0.5]$

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

D. $x \in [-0.15, -0.06]$

E. $x_1 \in [-0.64, -0.57]$ and $x_2 \in [0.4, 3.2]$