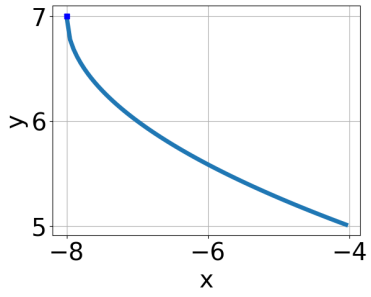
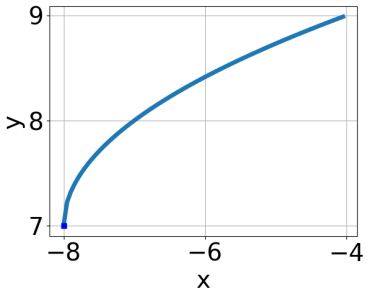
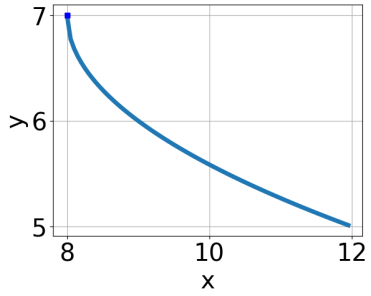
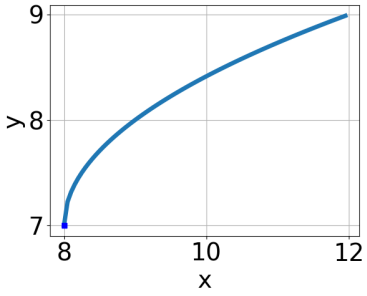
1. Choose the graph of the equation below.

$$f(x) = \sqrt{x-8} + 7$$

A.


C.


B.


D.


E. None of the above.

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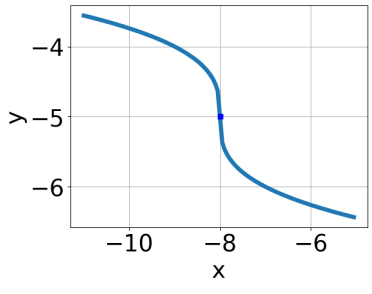
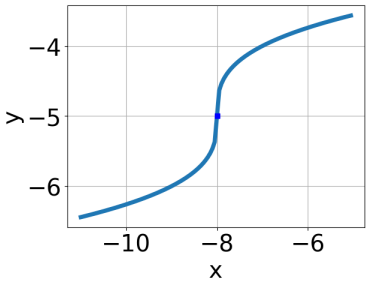
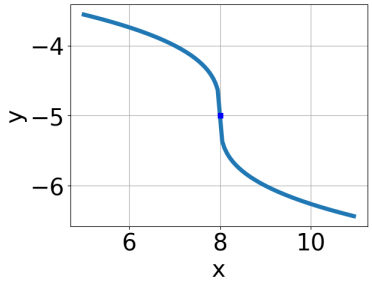
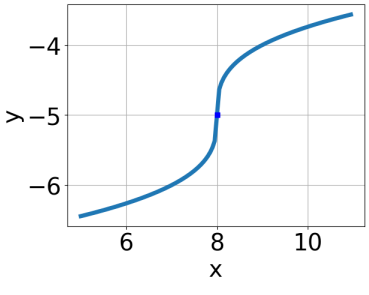
2. Choose the graph of the equation below.

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

A.


C.


B.


D.


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.

$$\sqrt{-18x^2 + 54} - \sqrt{-69x} = 0$$

A. $x \in [2, 6.3]$

B. $x_1 \in [0.6, 0.9]$ and $x_2 \in [1.5, 7.5]$

C. $x \in [-2.5, 0.2]$

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

E. $x_1 \in [-2.5, 0.2]$ and $x_2 \in [1.5, 7.5]$

---

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

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

A. $x \in [-1.8, -0.3]$

B. $x \in [2.3, 3.4]$

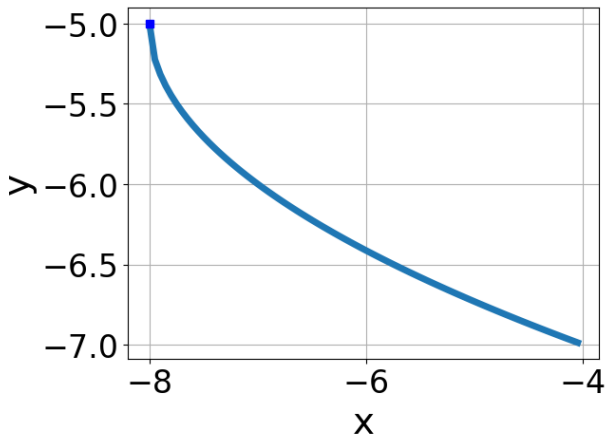
C. $x_1 \in [-2.9, -1.2]$ and $x_2 \in [0.5, 5.5]$

D. $x_1 \in [-1.8, -0.3]$ and $x_2 \in [0.5, 5.5]$

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

---

5. 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

---

6. What is the domain of the function below?

$$f(x) = \sqrt[8]{6x-4}$$

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

B. $(-\infty, a]$, where $a \in [0.9, 2.13]$

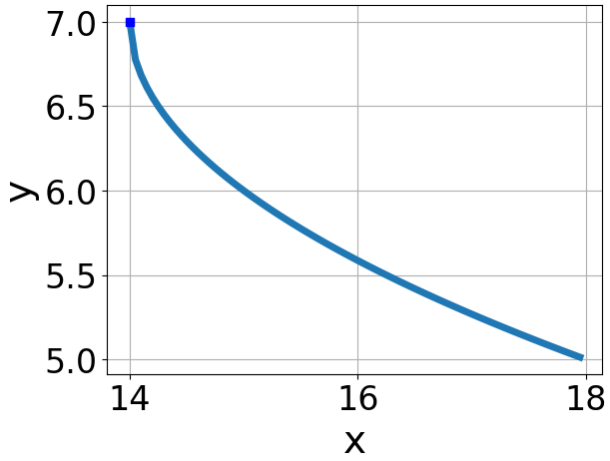
C. $(-\infty, a]$, where $a \in [0.33, 0.73]$

D. $[a, \infty)$, where $a \in [0.22, 0.71]$

E. $[a, \infty)$, where $a \in [1.48, 1.57]$

---

7. Choose the equation of the function graphed below.



A. $f(x) = -\sqrt[3]{x-14}+7$

B. $f(x) = \sqrt[3]{x+14}+7$

C. $f(x) = \sqrt[3]{x-14}+7$

D. $f(x) = -\sqrt[3]{x+14}+7$

E. None of the above

---

8. What is the domain of the function below?

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

A. $[a, \infty)$, where $a \in [-5.2, -1.5]$

B. $(-\infty, a]$, where $a \in [-2.31, -1.53]$

C. $(-\infty, a]$, where $a \in [-0.64, -0.23]$

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

E. $[a, \infty)$, where $a \in [-0.7, 0.7]$

---

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

$$\sqrt{64x^2+18} - \sqrt{88x} = 0$$

A. $x \in [0.33, 2.19]$

B. $x_1 \in [-1.57, -0.3]$ and $x_2 \in [-3, 0.3]$

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

D. $x \in [-0.97, 1.04]$

E. $x_1 \in [-0.97, 1.04]$ and $x_2 \in [1.1, 3.9]$

---

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

$$\sqrt{-5x-3} - \sqrt{-4x-7} = 0$$

A. $x_1 \in [-2.81, -1.57]$ and $x_2 \in [-3.6, 0.4]$

B. $x_1 \in [-1.07, -0.56]$ and $x_2 \in [4, 5]$

C. $x \in [3.35, 4.65]$

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

E. $x \in [-10.77, -8.12]$
