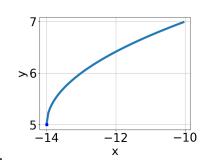
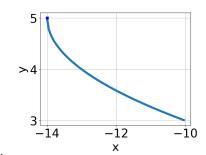
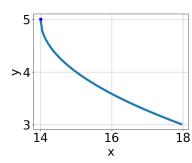
1. Choose the graph of the equation below.

$$f(x) = -\sqrt{x - 14} + 5$$

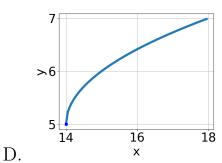




A.



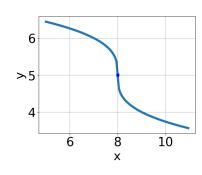
С.

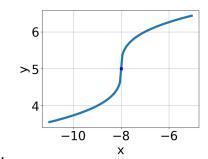


В.

- E. None of the above.
- 2. Choose the graph of the equation below.

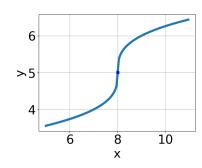
$$f(x) = \sqrt[3]{x-8} + 5$$

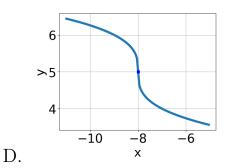




A.

В.





С.

E. None of the above.

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

$$\sqrt{-20x^2 + 30} - \sqrt{10x} = 0$$

A. $x_1 \in [-5.5, 0.5]$ and $x_2 \in [0.85, 1.37]$

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

C. $x \in [-5.5, 0.5]$

D. $x \in [0, 8]$

E. $x_1 \in [0, 8]$ and $x_2 \in [1.4, 1.62]$

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

$$\sqrt{2x-9} - \sqrt{5x-8} = 0$$

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

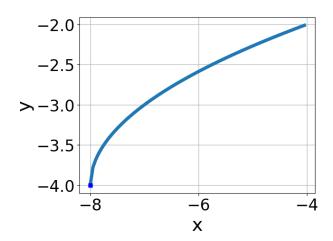
B. $x_1 \in [0.3, 2.6]$ and $x_2 \in [2.5, 10.5]$

C. $x \in [-0.8, 1]$

D. $x \in [-7.7, -4.9]$

E. $x_1 \in [-0.8, 1]$ and $x_2 \in [2.5, 10.5]$

5. Choose the equation of the function graphed below.



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

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

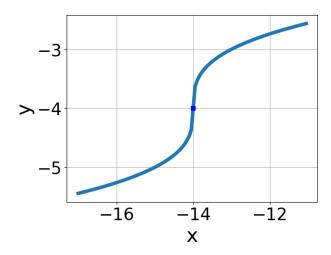
C.
$$f(x) = -\sqrt[3]{x-8} - 4$$

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

- E. None of the above
- 6. What is the domain of the function below?

$$f(x) = \sqrt[5]{6x + 8}$$

- A. The domain is $(-\infty, a]$, where $a \in [-1.17, 0.24]$
- B. $(-\infty, \infty)$
- C. The domain is $[a, \infty)$, where $a \in [-0.97, 1.14]$
- D. The domain is $[a, \infty)$, where $a \in [-2.01, -0.9]$
- E. The domain is $(-\infty, a]$, where $a \in [-3.24, -1.16]$
- 7. Choose the equation of the function graphed below.



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

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

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

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

E. None of the above

8. What is the domain of the function below?

$$f(x) = \sqrt[3]{9x + 8}$$

A. The domain is $[a, \infty)$, where $a \in [-1.55, -1.07]$

B. The domain is $(-\infty, a]$, where $a \in [-0.9, -0.87]$

C. The domain is $[a, \infty)$, where $a \in [-0.97, 0.11]$

D. The domain is $(-\infty, a]$, where $a \in [-1.16, -0.98]$

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

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

$$\sqrt{-45x^2 - 48} - \sqrt{94x} = 0$$

A. $x \in [-0.91, -0.77]$

B.
$$x_1 \in [-1.33, -1.16]$$
 and $x_2 \in [-2.89, 0.11]$

C.
$$x_1 \in [0.54, 1.44]$$
 and $x_2 \in [-0.11, 6.89]$

D.
$$x \in [-1.33, -1.16]$$

- E. All solutions lead to invalid or complex values in the equation.
- 10. Solve the radical equation below. Then, choose the interval(s) that the solution(s) belongs to.

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

A.
$$x \in [-0.22, 0.61]$$

B.
$$x \in [-8.71, -6.71]$$

C.
$$x_1 \in [0.82, 1.31]$$
 and $x_2 \in [-1.67, 3.33]$

D.
$$x_1 \in [-0.22, 0.61]$$
 and $x_2 \in [-1.67, 3.33]$

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