

Determine which two functions are inverses of each other.

1) $f(x) = \sqrt{x}$ $g(x) = \frac{1}{\sqrt{x}}$ $h(x) = x^2$

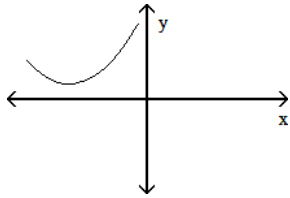
1) _____

- A) None B) $f(x)$ and $h(x)$ C) $g(x)$ and $h(x)$ D) $f(x)$ and $g(x)$

Does the graph represent a function that has an inverse function?

2)

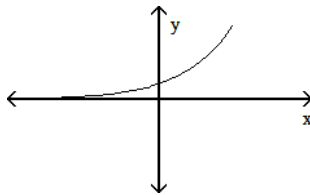
2) _____



- A) No B) Yes

3)

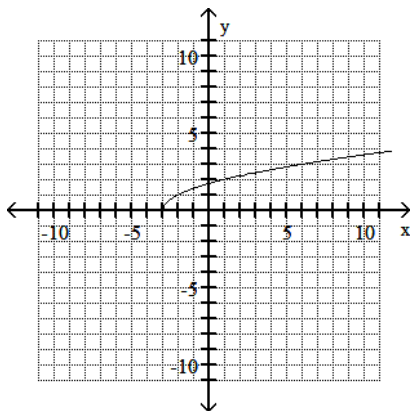
3) _____



- A) No B) Yes

Use the graph of f to draw the graph of its inverse function.

4)



Find the inverse of the one-to-one function.

5) $f(x) = \frac{4x + 7}{5}$

5) _____

- A) $f^{-1}(x) = \frac{5}{4x + 7}$ B) $f^{-1}(x) = \frac{5}{4x - 7}$ C) $f^{-1}(x) = \frac{5x - 7}{4}$ D) $f^{-1}(x) = \frac{5x + 7}{4}$

$$6) f(x) = \frac{5}{3x+7}$$

6) _____

$$A) f^{-1}(x) = \frac{5}{3x} - \frac{7}{3}$$

$$B) f^{-1}(x) = \frac{3x+7}{5}$$

$$C) f^{-1}(x) = \frac{7}{3} - \frac{5}{3x}$$

$$D) f^{-1}(x) = \frac{5}{3y} - \frac{7}{3}$$

$$7) f(x) = \sqrt{x-6}$$

7) _____

$$A) f^{-1}(x) = x+6$$

$$B) f^{-1}(x) = x^2 - 6$$

$$C) f^{-1}(x) = x^2 + 6$$

$$D) f^{-1}(x) = \frac{1}{x^2+6}$$

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

8) _____

$$A) f^{-1}(x) = x^3 + 25$$

$$B) f^{-1}(x) = \frac{1}{x^3+5}$$

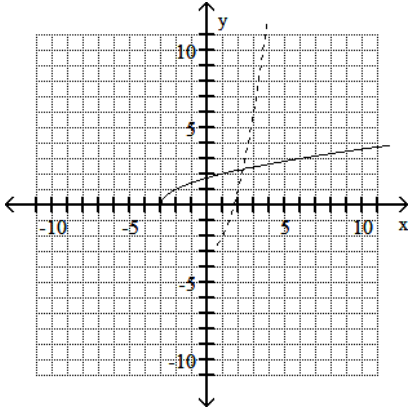
$$C) f^{-1}(x) = x^3 + 5$$

$$D) f^{-1}(x) = x+5$$

Answer Key

Testname: PRACTICE09

- 1) B
- 2) A
- 3) B
- 4)



- 5) C
- 6) A
- 7) C
- 8) C