

## Inverse Functions - Practice Quiz

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**Find the inverse of each function.**

1)  $f(n) = (n - 2)^5$

- A)  $f^{-1}(n) = 1 + n^5$   
 B)  $f^{-1}(n) = (n - 2)^3$   
 C)  $f^{-1}(n) = \sqrt[5]{n} + 2$   
 D)  $f^{-1}(n) = -3 + (n - 2)^3$

3)  $h(x) = -x + 1$

- A)  $h^{-1}(x) = -x + 2$   
 B)  $h^{-1}(x) = \frac{-x - 1}{2}$   
 C)  $h^{-1}(x) = -x + 1$   
 D)  $h^{-1}(x) = -4 - \frac{3}{5}x$

5)  $g(x) = \sqrt[5]{\frac{-x + 2}{2}}$

- A)  $g^{-1}(x) = -\sqrt[3]{x} + 1$   
 B)  $g^{-1}(x) = -2x^5 + 2$   
 C)  $g^{-1}(x) = \sqrt[3]{x} - 2$   
 D)  $g^{-1}(x) = -3 + (x + 1)^5$

7)  $g(x) = \frac{3}{x - 2}$

- A)  $g^{-1}(x) = \frac{4}{x}$   
 B)  $g^{-1}(x) = -\frac{3}{x + 3} + 1$   
 C)  $g^{-1}(x) = \frac{3}{x} + 2$   
 D)  $g^{-1}(x) = -\frac{4}{x - 1} + 2$

2)  $g(x) = -2 - x^5$

- A)  $g^{-1}(x) = \sqrt[3]{x - 2} + 2$   
 B)  $g^{-1}(x) = -\sqrt[3]{x - 1}$   
 C)  $g^{-1}(x) = \sqrt[5]{-x - 2}$   
 D)  $g^{-1}(x) = x^3$

4)  $f(x) = \sqrt[3]{\frac{x + 1}{2}}$

- A)  $f^{-1}(x) = (x + 2)^5 - 1$   
 B)  $f^{-1}(x) = 2(x - 1)^5$   
 C)  $f^{-1}(x) = -x^5 + 2$   
 D)  $f^{-1}(x) = 2x^3 - 1$

6)  $g(x) = 3 + x^3$

- A)  $g^{-1}(x) = \sqrt[3]{-x - 3}$   
 B)  $g^{-1}(x) = \sqrt[3]{\frac{-x - 3}{2}}$   
 C)  $g^{-1}(x) = (x - 1)^3 + 1$   
 D)  $g^{-1}(x) = \sqrt[3]{x - 3}$

8)  $f(n) = -2n + 10$

- A)  $f^{-1}(n) = \frac{10 - n}{2}$   
 B)  $f^{-1}(n) = -2n - 5$   
 C)  $f^{-1}(n) = -n - 4$   
 D)  $f^{-1}(n) = \frac{n + 1}{3}$

## Answers to Inverse Functions - Practice Quiz (ID: 1)

- |      |      |      |      |
|------|------|------|------|
| 1) C | 2) C | 3) C | 4) D |
| 5) B | 6) D | 7) C | 8) A |