

7-4 Inverse Functions

Find the inverse of each function.

1) $f(n) = 8n - 4$

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

3) $f(n) = -\frac{3}{n-3}$

4) $h(n) = -\frac{3}{n} - 2$

5) $g(x) = \frac{4}{x+3}$

6) $f(x) = \frac{3}{x+2} - 2$

7) $g(x) = -x - 5$

8) $f(x) = \frac{-x+3}{6}$

9) $g(x) = -3 - x^5$

10) $f(x) = -x - 2$

11) $g(x) = \frac{x}{2}$

12) $g(x) = 2x + 4$

State if the given functions are inverses.

13) $f(x) = \frac{1}{5}x + 1$
 $g(x) = 5x - 5$

14) $g(x) = \frac{1}{x+2}$
 $f(x) = -\frac{1}{x} + 3$

15) $f(x) = \frac{1}{x+1}$
 $g(x) = \frac{4}{x+1} - 1$

16) $f(x) = -1 + \frac{3}{5}x$
 $g(x) = \frac{5}{3}x + \frac{5}{3}$

17) $h(x) = \frac{3}{x-1} - 2$
 $f(x) = -\frac{4}{x-2} - 1$

18) $f(n) = \sqrt[3]{n+2}$
 $h(n) = (n-2)^3$

19) $f(x) = -2x + 2$
 $g(x) = 1 - \frac{1}{2}x$

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