

## Inverses Practice

Find the inverse of each function.

1)  $h(x) = -\frac{1}{3}x + 1$

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

3)  $f(x) = 2x + 8$

4)  $g(n) = (n - 1)^2 - 5$

5)  $g(x) = -\frac{3}{4}x - \frac{15}{4}$

6)  $f(n) = 3 + (n - 1)^2$

State if the given functions are inverses.

7)  $g(x) = x^2 + 2$   
 $f(x) = (x + 2)^2 + 3$

8)  $f(x) = \sqrt{x + 9}$   
 $g(x) = x^2 - 9$

9)  $g(x) = \frac{2}{5}x - \frac{2}{5}$   
 $f(x) = 1 + \frac{5}{2}x$

10)  $g(n) = -\frac{5}{6}n - \frac{5}{2}$   
 $f(n) = 3n - 2$

## Inverses Practice

Find the inverse of each function.

1)  $h(x) = -\frac{1}{3}x + 1$

$h^{-1}(x) = -3x + 3$

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

$f^{-1}(x) = \frac{6 - 7x}{3}$

3)  $f(x) = 2x + 8$

$f^{-1}(x) = -4 + \frac{1}{2}x$

4)  $g(n) = (n - 1)^2 - 5$

$g^{-1}(n) = \sqrt{n + 5} + 1$

5)  $g(x) = -\frac{3}{4}x - \frac{15}{4}$

$g^{-1}(x) = -5 - \frac{4}{3}x$

6)  $f(n) = 3 + (n - 1)^2$

$f^{-1}(n) = \sqrt{n - 3} + 1$

State if the given functions are inverses.

7)  $g(x) = x^2 + 2$   
 $f(x) = (x + 2)^2 + 3$

No

8)  $f(x) = \sqrt{x + 9}$   
 $g(x) = x^2 - 9$

Yes

9)  $g(x) = \frac{2}{5}x - \frac{2}{5}$   
 $f(x) = 1 + \frac{5}{2}x$

Yes

10)  $g(n) = -\frac{5}{6}n - \frac{5}{2}$   
 $f(n) = 3n - 2$

No