

Inverse Functions Exercises

1: Work out the following:

a) If $h(x) = x - 9$, find $h^{-1}(4)$

b) If $g(x) = \frac{-x}{3}$, find $g^{-1}(10)$

2: Work out the following:

a) If $f(x) = \frac{-x-8}{8}$, find $f^{-1}(8)$

b) If $h(x) = \sqrt{\left(\frac{-x}{7}\right)} + 3$, find $h^{-1}(10)$

3: Work out the following:

a) If $f(x) = \frac{5}{x-8}$, find $f^{-1}\left(-1\frac{2}{3}\right)$

b) If $g(x) = \frac{5x+10}{6x+3}$, find $g^{-1}\left(1\frac{1}{39}\right)$

4: Work out the following:

a) If $h(x) = \frac{-2x+9}{x-1}$, find $h^{-1}(3)$

b) If $g(x) = \frac{4}{x} + 3$, find $g^{-1}(1)$

5: Find the inverse of each function:

a) If $f(x) = x^2$, find $f^{-1}(x)$

b) If $h(x) = \sqrt{x}$, find $h^{-1}(x)$

6: Find the inverse of each function:

a) If $f(x) = \sqrt{\left(\frac{-x-10}{10}\right)}$, find $f^{-1}(x)$

b) If $g(x) = -8(x-10)^2$, find $g^{-1}(x)$

7: Find the inverse of each function:

a) If $g(x) = \frac{9}{x+4}$, find $g^{-1}(x)$

b) If $f(x) = \frac{-6x+7}{5x-4}$, find $f^{-1}(x)$