

# Evaluating Rational Functions

I Evaluate each function for the given value

a)  $f(x) = \frac{x+7}{2x}$  ; find  $f(-4)$

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b)  $f(x) = \frac{x+5}{2x-5}$  ; find  $f(4)$

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c)  $f(x) = \frac{10x}{-x-5}$  ; find  $f(9)$

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d)  $f(x) = \frac{x-2}{x^2+2x-8}$  ; find  $f(3)$

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e)  $f(x) = \frac{3}{9x^2-7}$  ; find  $f(0)$

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f)  $f(x) = \frac{25x^2-9}{5x^2+7x-6}$  ; find  $f(-1)$

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g)  $f(x) = \frac{x-2}{2x-7}$  ; find  $f(7)$

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h)  $f(x) = \frac{-3}{2x-8}$  ; find  $f(7)$

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# Evaluating Rational Functions

## Answers

a)  $f(x) = \frac{x+7}{2x}$  ; find  $f(-4)$

$-\frac{3}{8}$

b)  $f(x) = \frac{x+5}{2x-5}$  ; find  $f(4)$

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c)  $f(x) = \frac{10x}{-x-5}$  ; find  $f(9)$

$-\frac{45}{7}$

d)  $f(x) = \frac{x-2}{x^2+2x-8}$  ; find  $f(3)$

$\frac{1}{7}$

e)  $f(x) = \frac{3}{9x^2-7}$  ; find  $f(0)$

$-\frac{3}{7}$

f)  $f(x) = \frac{25x^2-9}{5x^2+7x-6}$  ; find  $f(-1)$

-2

g)  $f(x) = \frac{x-2}{2x-7}$  ; find  $f(7)$

$\frac{5}{7}$

h)  $f(x) = \frac{-3}{2x-8}$  ; find  $f(7)$

$-\frac{1}{2}$