

**Functions**

Name: \_\_\_\_\_

**Answer #1-2 using the graph of  $h(x)$ .**

1. Find the following function values.

a)  $h(-3) = \underline{\hspace{2cm}}$

b)  $h(5) = \underline{\hspace{2cm}}$

c)  $h(-6) = \underline{\hspace{2cm}}$

d)  $h(4) = \underline{\hspace{2cm}}$

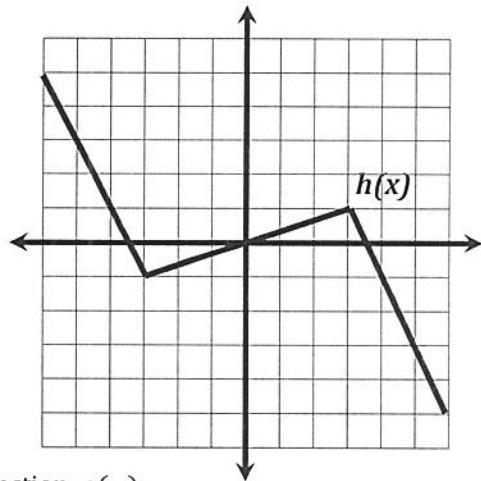
2. Find the value(s) of  $x$  where the function has the indicated value.

a)  $h(x) = 3$

b)  $h(x) = 1$

c)  $h(x) = 0$

d)  $h(x) = -3$

3. Evaluate or solve using the table below representing the function  $g(x)$ .

a)  $g(-4)$

b)  $g(12)$

c)  $g(x) = 10$

d)  $g(0)$

$x$	-4	-2	-1	3	7	9	12	13
$y$	8	7	10	12	-4	-9	0	3

e)  $g(x) = 7$

f)  $g(x) = -1$

4. Use the functions below to answer the following questions.

$f(x) = 2x - 3$	$g(x) = x^2 - 4x + 1$	$h(x) = \frac{2x}{x+5}$
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a)  $h(-7)$

b)  $f(-5)$

c)  $h(0)$

d)  $g(-2)$

e)  $h(-5)$

f)  $g(3)$

g)  $f(a)$

h)  $g(x^2)$

i)  $h(-c)$

j)  $f(x-2)$

k)  $h(3x)$

l)  $g(x+3)$