

Name \_\_\_\_\_

Block \_\_\_\_\_

Algebra 1

Complete each table. Then answer the questions below, showing all your work.

$$f(x) = 3x - 2$$

$x$	$f(x)$
-2	
-1	
0	
	7
	-2

$$g(x) = 2|x - 1|$$

$x$	$g(x)$
-2	
1	
0	
	6
	-2

$$h(x) = \frac{1}{2}x^2$$

$x$	$h(x)$
-2	
-1	
0	
	50
	40.5

$f(10) =$

$g(10) =$

$h(10) =$

If  $f(x) = 12$ , what is  $x$ ?

If  $g(x) = 12$ , what is  $x$ ?

If  $h(x) = 12$ , what is  $x$ ?

If  $f(x) = -3$ , what is  $x$ ?

If  $g(x) = 16$ , what is  $x$ ?

If  $h(x) = -8$ , what is  $x$ ?

Name Answers

Block \_\_\_\_\_

Algebra 1

Complete each table. Then answer the questions below, showing all your work.

$$f(x) = 3x - 2$$

x	f(x)
-2	-4
-1	-5
0	-2
3	7
0	-2

$$g(x) = 2|x - 1|$$

x	g(x)
-2	6
1	4
0	2
4 or -2	6
N/A	-2

$$h(x) = \frac{1}{2}x^2$$

x	h(x)
-2	2
-1	1/2
0	0
±10	50
±9	40.5

$$f(10) = 28$$

$$g(10) = 18$$

$$h(10) = 50$$

If  $f(x) = 12$ , what is  $x$ ?  $x = 14/3$

If  $g(x) = 12$ , what is  $x$ ?  $x = 7$  or  $-5$

If  $h(x) = 12$ , what is  $x$ ?  $x = \pm\sqrt{24}$

If  $f(x) = -3$ , what is  $x$ ?  $x = -1/3$

If  $g(x) = 16$ , what is  $x$ ?  $x = 9$  or  $-7$

If  $h(x) = -8$ , what is  $x$ ? No answer