

Name: KEY BLOCK _____

Math 10 100% Quiz Unit 3

Column 1.

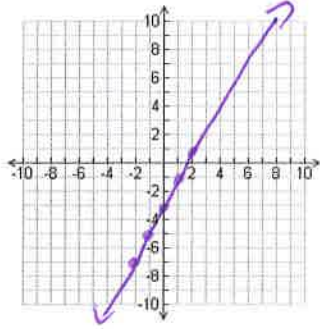
Column 2.

Column 3

Complete this column if you make an error in column 1.

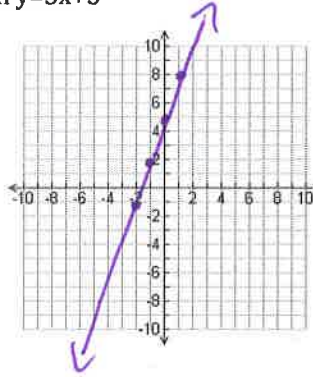
Complete this column if you make an error in column 2.

1. Graph $y=2x-3$



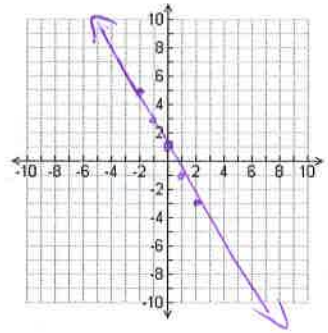
x	y
-2	-7
-1	-5
0	-3
1	-1
2	1

Graph $y=3x+5$



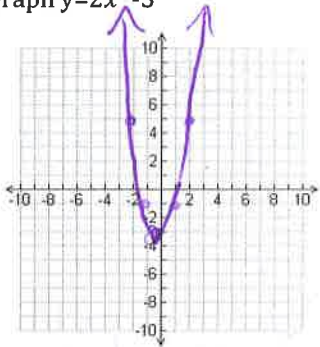
x	y
-2	-1
-1	2
0	5
1	8
2	11

Graph $y=-2x+1$

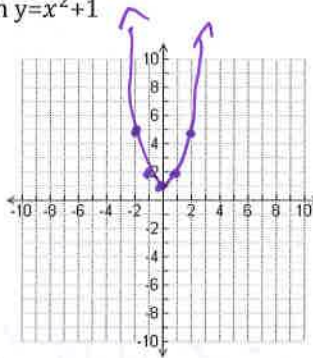


x	y
-2	5
-1	3
0	1
1	-1
2	-3

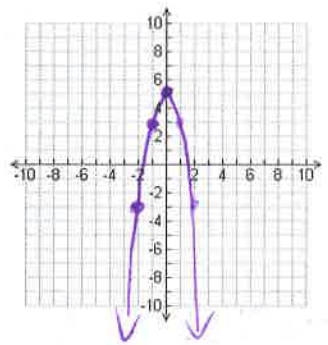
2. Graph $y=2x^2-3$



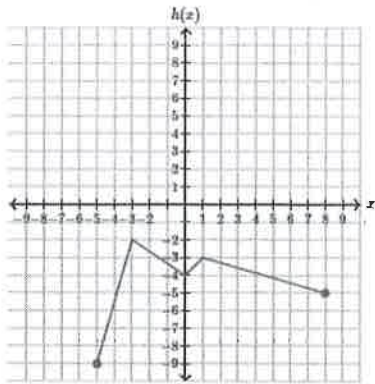
Graph $y=x^2+1$



Graph $y=-2x^2+5$



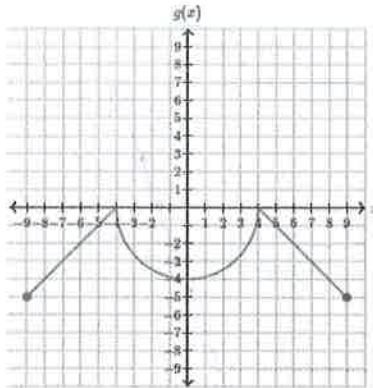
3. Determine the domain and range of the following in inequality form:



D: $-5 \leq x \leq 8$

R: $-9 \leq y \leq -1$

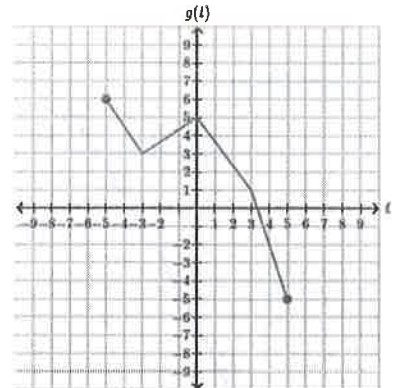
Determine the domain and range of the following in inequality form:



D: $-9 \leq x \leq 9$

R: $-5 \leq y \leq 0$

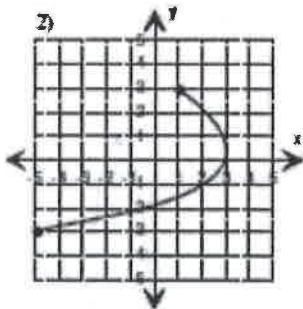
Determine the domain and range of the following in inequality form:



D: $-5 \leq x \leq 5$

R: $-5 \leq y \leq 6$

4. Determine the domain and range of the following using brackets.



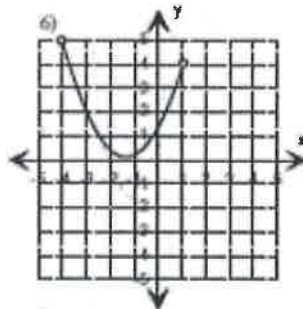
ops
D: $-5 \leq x \leq 3$

R: $[-3, 3]$

D: $[-5, 3]$

R

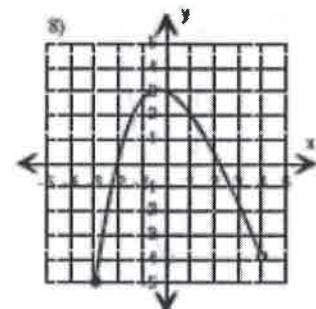
Determine the domain and range of the following using brackets:



D: ~~[-4, 1]~~ $(-4, 1)$

R: $[0, 5)$

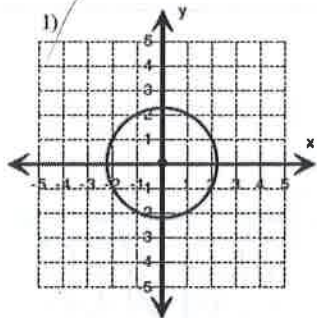
Determine the domain and range of the following using brackets:



D: $[-3, 4)$

R: $[-5, 3]$

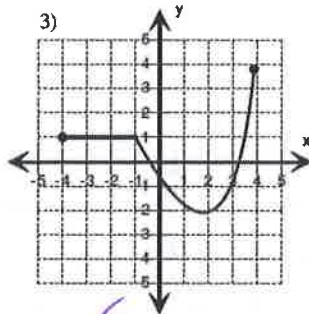
5. Is this a function?



Function
 Not a Function

$f^{-1} = \{0, 2\}$

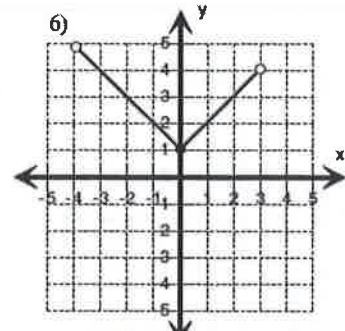
Is this a function?



Function
 Not a Function

$f^{-1} = \{2, 3\}$
 $f(2) = -2$
 $f(3) = 3$

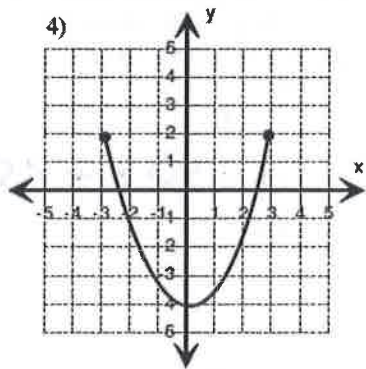
Is this a function?



Function
 Not a Function

$f^{-1} = \{1, 2, 3, 4, 5\}$

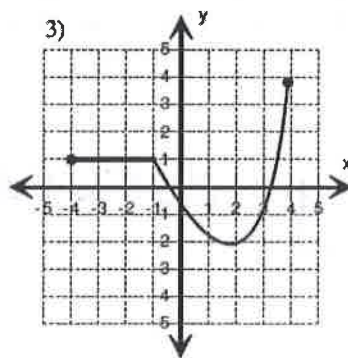
6. Determine the domain and range of the following.



D: $-3 \leq x \leq 3$ or $[-3, 3]$

R: $-4 \leq y \leq 2$ or $[-4, 2]$

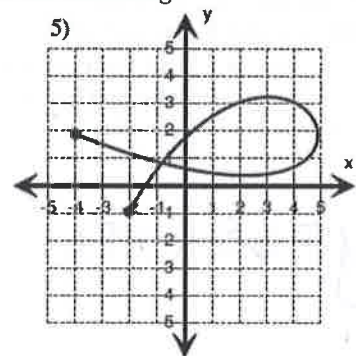
Determine the domain and range of the following.



D: $-4 \leq x \leq 4$

R: $-2 \leq y \leq 4$

Determine the domain and range of the following.



D: $-4 \leq x \leq 5$ or $[-4, 5]$

R: $-1 \leq y \leq 3\frac{1}{3}$ or $[-1, 3\frac{1}{3}]$

7. Find $f(-2)$ if $f(x) = 3x - 5$

$f(-2) = 3(-2) - 5$
 $f(-2) = -11$

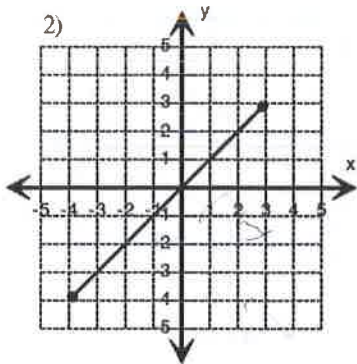
Find $f(-2)$ if $f(x) = -3x + 7$

$f(-2) = -3(-2) + 7$
 $f(-2) = 13$

Find $f(3)$ if $f(x) = -2x - 5$

$f(3) = -2(3) - 5$
 $f(3) = -11$

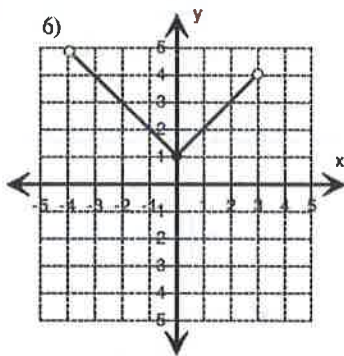
8. Given the following graph of $g(x)$ find $g(-2)$



$x = -2$

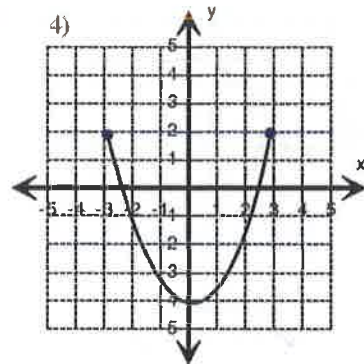
$g(-2) = -2$ $y = -2$

Given the following graph of $g(x)$ find $g(3)$



$g(3) = \text{no sol}$

Given the following graph of $h(x)$ find $h(0)$



$h(0) = -4$

9. A plumber charges a flat fee of \$50 to make house calls and then also charges \$65 an hour for his services. Write an equation to represent this scenario.

$y = 65x + 50$

A cab driver charges \$3.50 to get into his car and then charges \$0.35 per k travelling. Write an equation to represent this scenario.

$y = 0.35x + 3.50$

A computer technician charges \$50 an hour plus a service fee of \$35 to make a house call. Write an equation to represent this scenario.

$y = 50x + 35$

10. What are the domain and range of the following equation?

$y = \sqrt{x - 3}$

D: $x \geq 3$ $[-3, \infty)$
 R: $y \geq 0$ $[0, \infty)$

What are the domain and range of the following equation?

$y = 2x^2$

D: $x = \mathbb{R}$
 R: $y \geq 0$

What are the domain and range of the following equation?

$y = 2x - 7$

D: $x = \mathbb{R}$
 R: $y = \mathbb{R}$