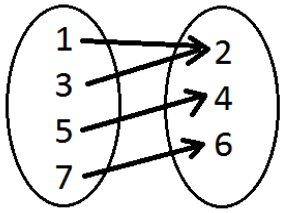
SM1

Name _____ Due Date _____ Period _____

Unit 7 Review: Functions

Determine which of the following are functions, then give the domain and range of the given graph in both interval notation and with inequalities or with roster notation.

1) Yes / No



2) Yes / No

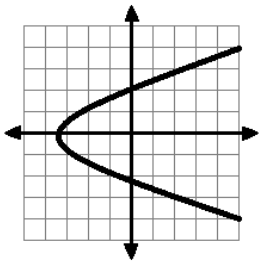
$\{(6,-1),(2,1),(3,8),(6,5),(-7,4)\}$

Interval Notation or Roster: D: R:	Inequality: D: R:	Interval Notation or Roster: D: R:	Inequality: D: R:

3) Yes / No

x	1	2	0	-1	1
y	4	8	7	3	2

4) Yes / No



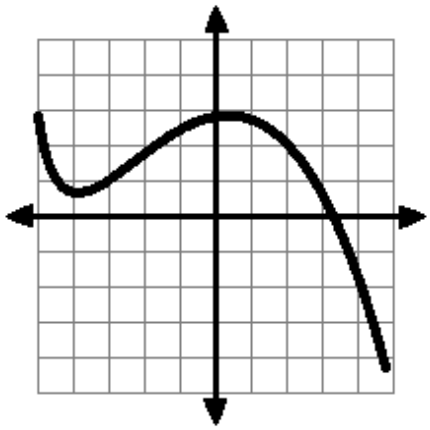
Interval Notation or Roster: D: R:	Inequality: D: R:	Interval Notation or Roster: D: R:	Inequality: D: R:

Find the indicated answer then write the coordinate pair:

5) Use the following function to answer the following:

$$f(x) = 4x^2 - 3x + 4$$

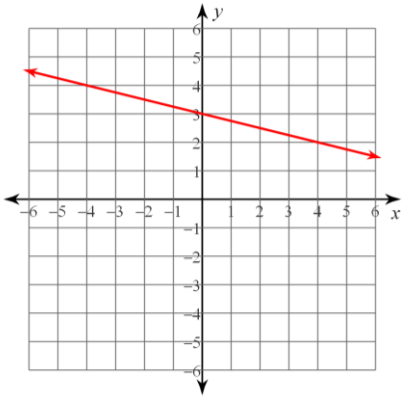
6)



a) $f(3) =$ (,)	a) $f(-3) =$ (,)
b) $f(0) =$ (,)	b) $f(2) =$ (,)
c) $f(-3) =$ (,)	c) $f(4) =$ (,)

Write a linear function for each of the following (Remember m (slope) and b (y-intercept):

7) Function: _____



8) Function: _____

x	y
-1	2
0	4
1	6
2	8

9) Function: _____

$(3,5)\ and\ (5,11)$

10) Function: _____

Caitlin has $200 in savings and makes $150 a week.

11) Using the situation in problem 10 what does $f(6) = 1100$ mean?

Use the following functions to answer 12-14.

$f(x) = 4x - 2$ $g(x) = 3x + 8$ $h(x) = 2x^2 + 4$

12) $f\big(g(-4)\big)$

13) $(h - f)(x)$

14) $(h + g)(x)$