Worksheet 1

- Review of Cartesian Coordinates

Worksheet 2

- Input Output Charts

Graphing Ordered Pairs

The table shows the relationship between a number of CD's and their cost.

Number of CD's	Cost ($)
1	12
2	24
3	36
4	48

(1,12)
(2,24)
(3,36)
(4,48)

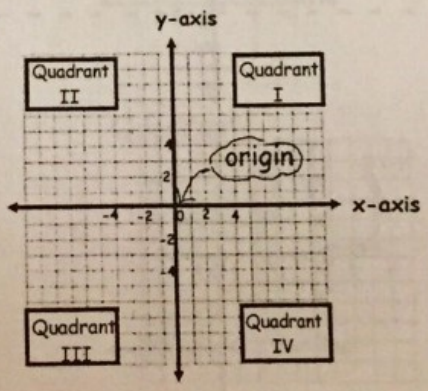
This relationship can be represented by a set of ordered pairs.

The first number of each pair represents the number of CD's, and the second number represents the cost.

What does (4, 48) mean? _____

What would (36, 3) mean? _____

Ordered pairs can be shown on a grid formed by 2 perpendicular number lines.



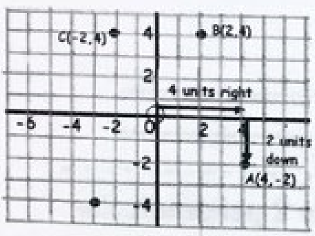
The horizontal line is called the x-axis. The vertical line is the y-axis. The point where the number lines meet is the origin. The 4 regions formed by the axes are quadrants.

Plotting or Graphing a Point

Ordered pairs, like (4,-2), can be used to name points on the grid. The first number in the ordered pair is called the x-coordinate. The second number is the y-coordinate.

x-coordinate ↴ ↙ y-coordinate

(4,-2)



The ordered pair to name point D in the diagram is ______.

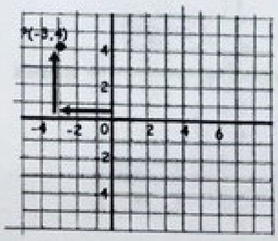
Why is (4,-2) different from (-2,4)?

____

____

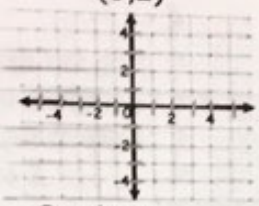
- -

The graph shows how to plot the point P(-3, 4).



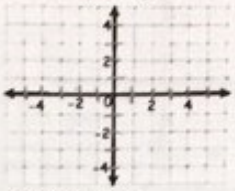
Plot the following points & name the quadrant

(3,2)



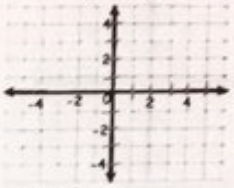
Quadrant ___

(4,-1)



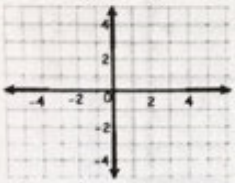
Quadrant ___

(-2,4)



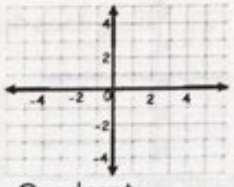
Quadrant ___

(-2,-3)



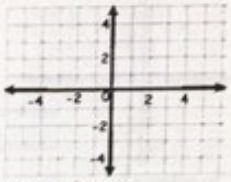
Quadrant ___

(-4,-1)



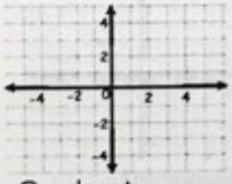
Quadrant ___

(2,-1)



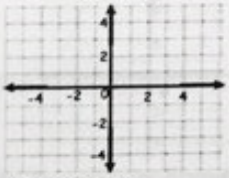
Quadrant ___

(0,3)



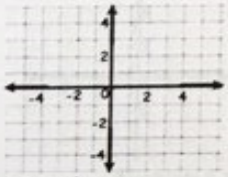
Quadrant ___

(-2,0)



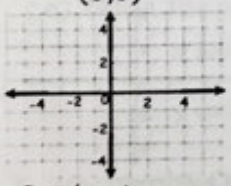
Quadrant ___

(-3,1)



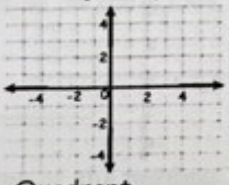
Quadrant ___

(0,0)



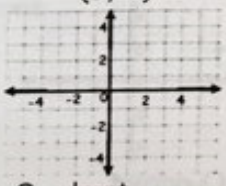
Quadrant ___

(-3,-5)



Quadrant ___

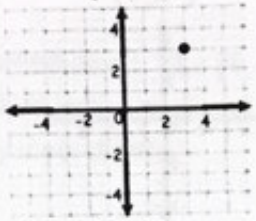
(5,-3)



Quadrant ___

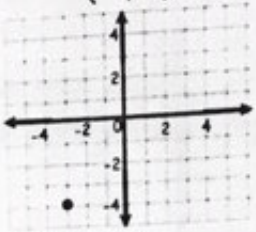
Name the point & quadrant

(,)



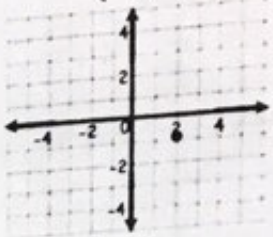
Quadrant ____

(,)



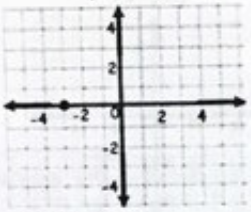
Quadrant ____

(,)



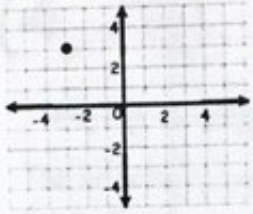
Quadrant ____

(,)



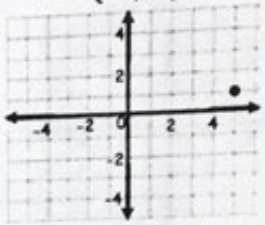
Quadrant ____

(,)



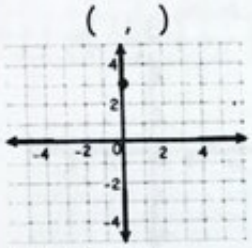
Quadrant ____

(,)



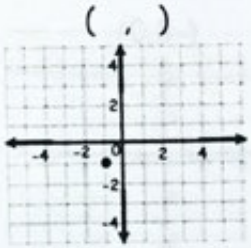
Quadrant ____

(,)



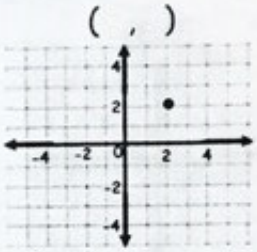
Quadrant ____

(,)



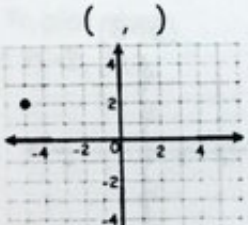
Quadrant ____

(,)

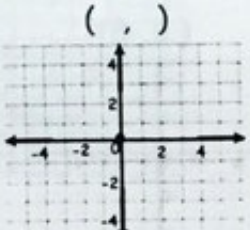


Quadrant ____

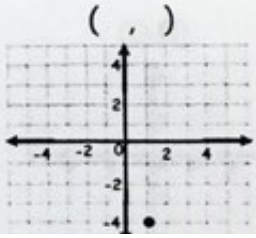
(,)



(,)

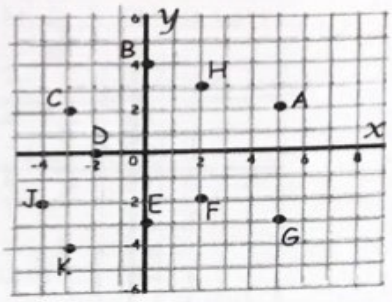


(,)



Exercise:

Use the grid to answer Questions 1 to 3.



1. State the coordinates of each point.

A. (,)
B. _____
C. _____
D. _____
E. _____
F. _____
G. _____
H. _____
J. _____
K. _____

2. a) Name the points in the first quadrant.

b) Name the points in the third quadrant.

c) In which quadrants do the points F and G lie?

F: *quadrant* ____ G: *quadrant* ____

d) Name the points that lie on the x axis; on the y axis.

x axis: _____

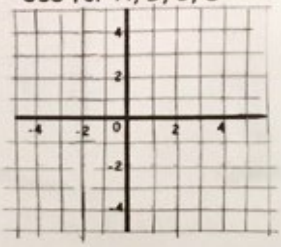
y axis: _____

3. What are the coordinates of the origin? _____

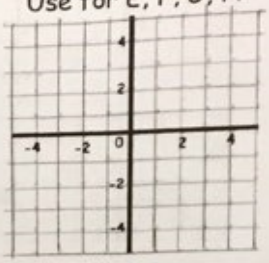
4. Plot each point on a grid.

A(3,3) B(4,-3) C(-4,-4) D(3,-2) E(4,0)
F(0,-3) G(-2,0) H(0,4)

Use for A, B, C, D



Use for E, F, G, H

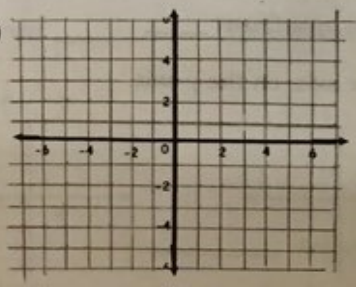


5. Graph each set of points on a separate grid. Join the points in the order given and return to the first point. Name the figure formed in each case.

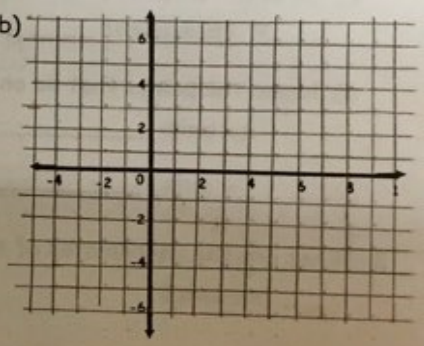
a) A(-6,4) B(4,2) C(2,-3) D(-6,-3)
b) E(4,5) F(9,5) G(9,0) H(4,0)
c) K(1,3) L(-6,-4) M(1,-4)
d) P(6,3) Q(0,-5) R(8,-6)
e) S(6,4) T(-3,4) U(5,-1) V(2,7) W(-2,-1)

solutions:

5 a)



b)

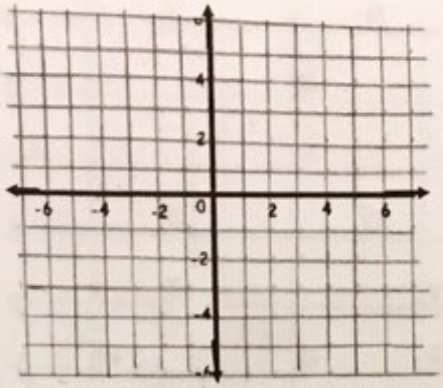


6

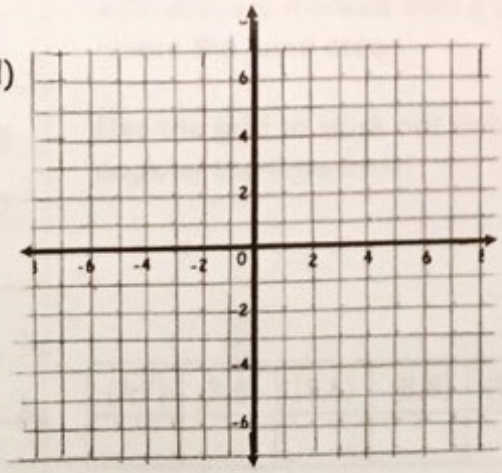
4

solutions:

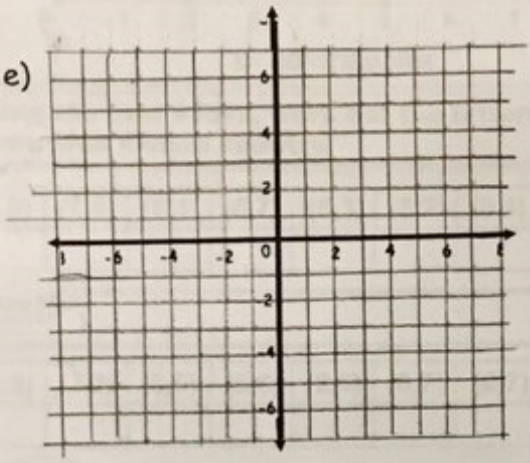
5 c)



d)

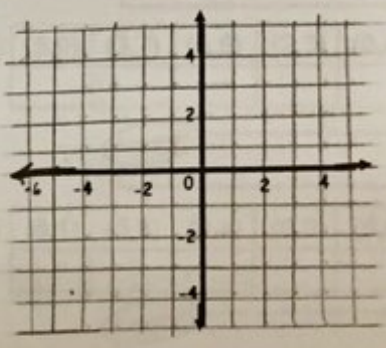


e)

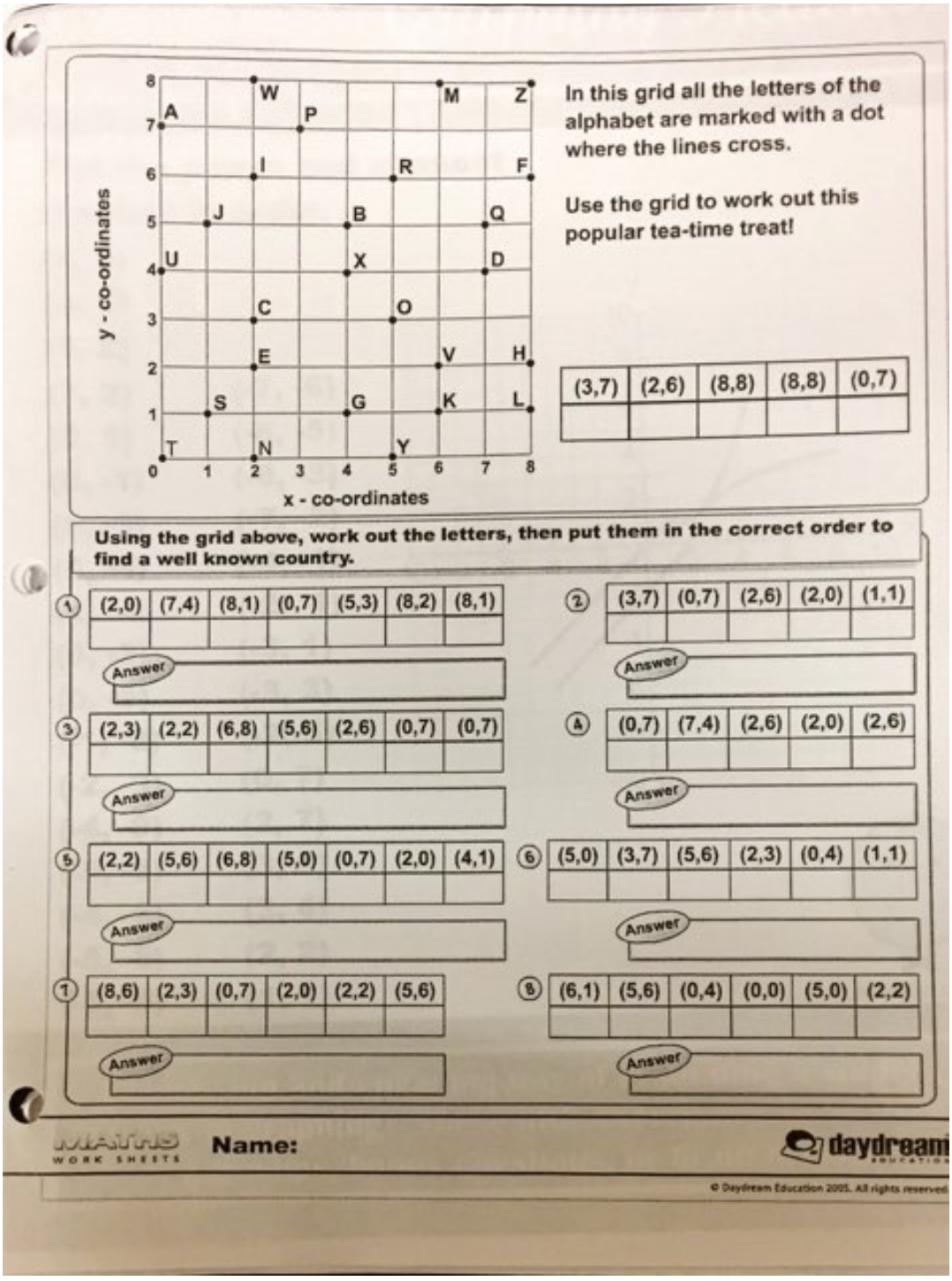


6. a) Plot the points A(-2,2), B(4,2), and C(4,-1).

b) What are the coordinates of point D so that ABCD forms a rectangle?



7. WRITE THE QUIZ


y - co-ordinates
x - co-ordinates
A
W
P
M
Z
I
R
F
J
B
Q
U
X
D
C
O
E
V
H
S
G
K
L
T
N
Y
0 1 2 3 4 5 6 7 8
In this grid all the letters of the alphabet are marked with a dot where the lines cross.
Use the grid to work out this popular tea-time treat!
(3,7) (2,6) (8,8) (8,8) (0,7)
Using the grid above, work out the letters, then put them in the correct order to find a well known country.
1 (2,0) (7,4) (8,1) (0,7) (5,3) (8,2) (8,1)
Answer
2 (3,7) (0,7) (2,6) (2,0) (1,1)
Answer
3 (2,3) (2,2) (6,8) (5,6) (2,6) (0,7) (0,7)
Answer
4 (0,7) (7,4) (2,6) (2,0) (2,6)
Answer
5 (2,2) (5,6) (6,8) (5,0) (0,7) (2,0) (4,1)
Answer
6 (5,0) (3,7) (5,6) (2,3) (0,4) (1,1)
Answer
7 (8,6) (2,3) (0,7) (2,0) (2,2) (5,6)
Answer
8 (6,1) (5,6) (0,4) (0,0) (5,0) (2,2)
Answer
WORK SHEETS
Name:
daydream
© Daydream Education 2005. All rights reserved.

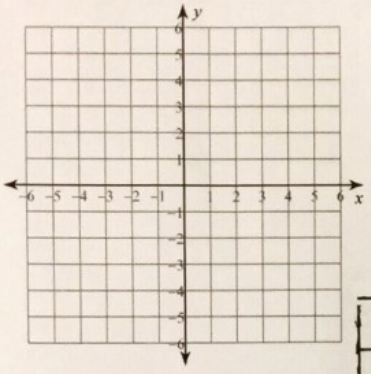
Math 9 Name_____ ID: 1

Input Output Charts

Date_____ Period____

Use subsitution to complete the chart and then sketch the graph.

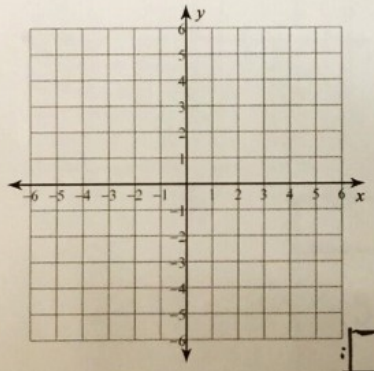
1) $y = -2x + 2$



X	y
-1	—
0	—
1	—

X = -1	X = 0	X = 1
y = -2x + 2 y = -2( ) + 2 y = — + 2 y = —		

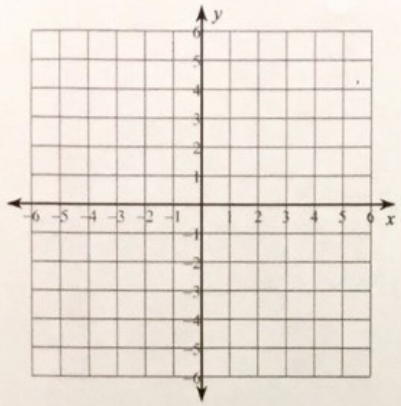
2) $y = -x + 3$



X	y
-2	
0	
2	

X = -2	X = 0	X = 2
y = -x + 3 y = -( ) + 3 y = — + 3 y =		

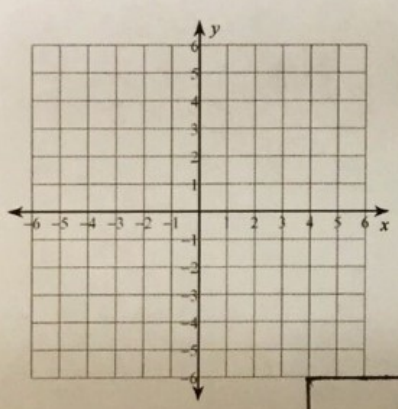
3) $y = -x$



x	y
-5	
0	
5	

x = -5	x = 0	x = 5
y = -x y = -( ) y = __		

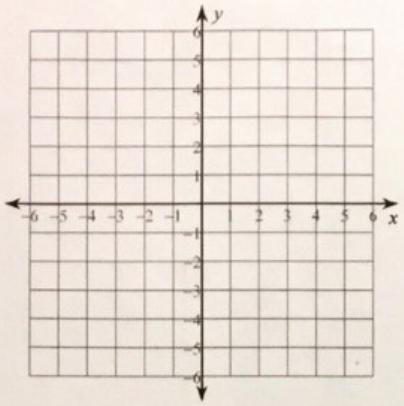
4) $y = \frac{3}{2}x - 3$



x	y
-2	
0	
2	

x = -2	x = 0	x = 2
$y = \frac{3}{2}x - 3$ $y = \frac{3}{2}( ) - 3$ y = __ -3 y = __		

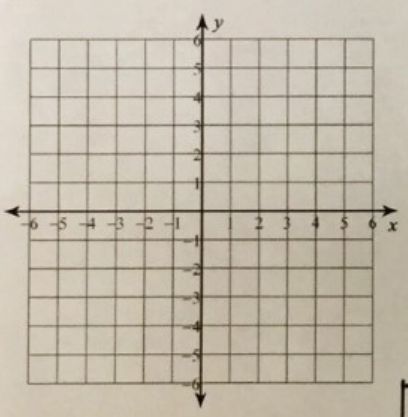
5) $y = 3x - 5$



x	y
-1	
0	
1	

x = -1	x = 0	x = 1
y = 3x - 5 y = 3( ) - 5 y = __ - 5 y = __		

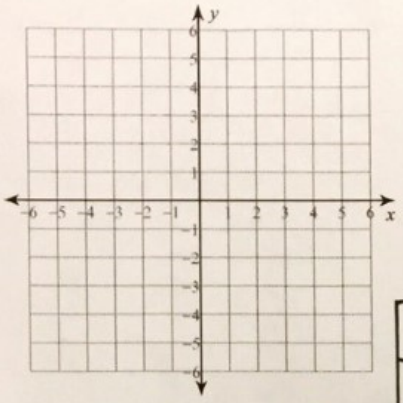
6) $y = -3x - 5$



x	y
-2	
0	
2	

x = -2	x = 0	x = 2
y = -3x - 5 y = -3( ) - 5 y = __ - 5 y = __		

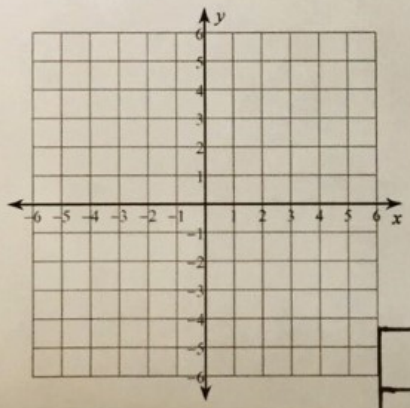
7) $y = -\frac{2}{5}x - 3$



x	y
-5	
0	
5	

x = -5	x = 0	x = 5
$y = \frac{-2}{5}x - 3$ $y = \frac{-2}{5}(\ ) - 3$ $y = \_ - 3$ $y = \_$		

8) $y = \frac{7}{2}x - 3$



x	y
-2	
0	
2	

x = -2	x = 0	x = 2
$y = \frac{7}{2}x - 3$ $y = \frac{7}{2}(\ ) - 3$ $y = \_ - 3$ $y = \_$		

Attachments

Section 4.1 Extra Practice.doc