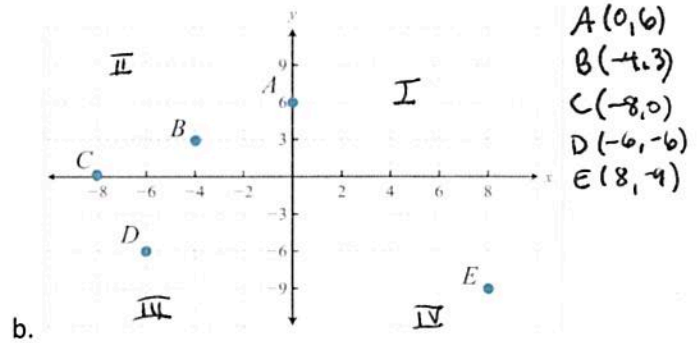
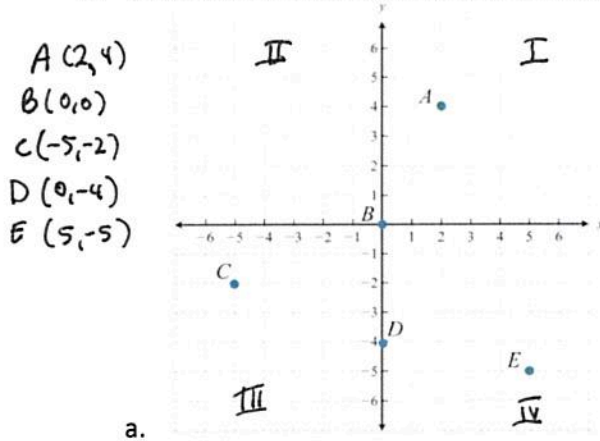


Instructions: Record your answers to each of these problems directly on this page. Do the work on a separate page and attach these pages to this one. You should do the work by hand, but you may check your work with a calculator. You can find printable graph paper here:

<http://betsymccall.net/prof/courses/resources/graphpaper.html>

1. Identify the points on the graph and label each quadrant.



2. Graph the listed points on a graph and identify which quadrant (if any) that the point falls in.

- a. $\{(-8, 3), (-4, 6), (0, -6), (6, 9)\}$
 b. $\{(-3.5, 0), (-1.5, 2), (0, 1.5), (2.5, -1.5)\}$

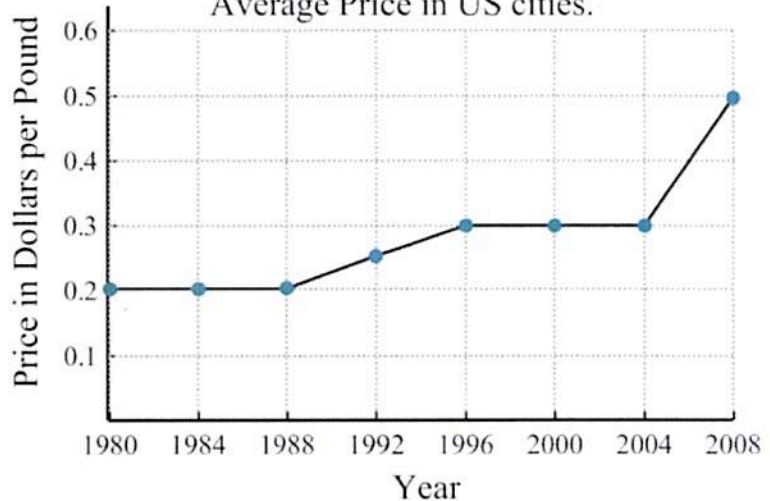
3. Answer the questions based on the graph.

- a. What was the average price of flour in 1988? 0.2
 b. What was the average price of flour in 1996? 0.3

4. Determine whether the given point satisfies the equation.

- a. $3x-4y=10$; $(2, -1)$ *yes*
 b. $-10x+2y=-95$; $(15, 110)$ *No*
 c. $y=-13x-12$; $(12, -23)$ *No*
 d. $y=4$; $(4, -4)$ *No*
 e. $x=3$; $(3, -3)$ *yes*

All Purpose White Flour,
Average Price in US cities.



5. Given the set of x-values $\{-2, -1, 0, 1, 2\}$, find the corresponding y-values and graph them.

- a. $y=2x-1$
 b. $6x-3y=9$ $9-6x=-3y \rightarrow 2x-3=y$
 c. $y=-5$

6. Plot the graphs and label the intercepts.

- a. $y=x$
- b. $-x+5y=0$
- c. $y=-4x+2$
- d. $y=-10$
- e. $x=-1$

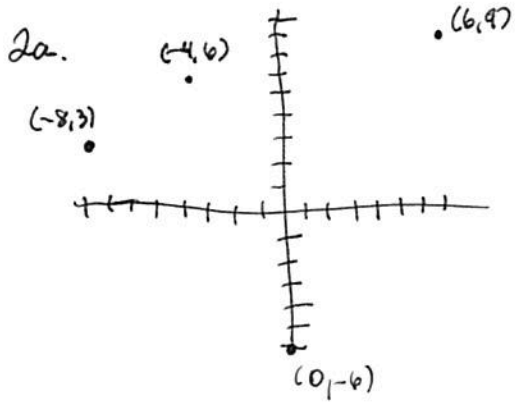
7. Graph the equations on a graph. Label any intercepts. Plot at least 5 points. Include values of x that are both positive and negative.

- a. $y = x^2 - 3x - 4$
- b. $x^2 + y^2 = 4$
- c. $y = |x|$
- d. $y = 2^x$

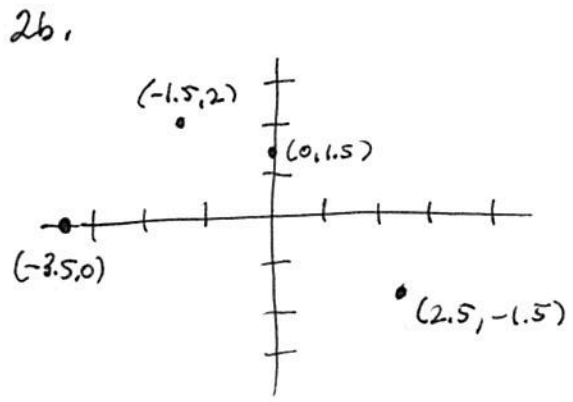
8. Graph the inequalities on a graph. Shade appropriately.

- a. $3x + 4y > 12$
- b. $y \leq -3x + 9$
- c. $y > 10$

MDE 010 HW8



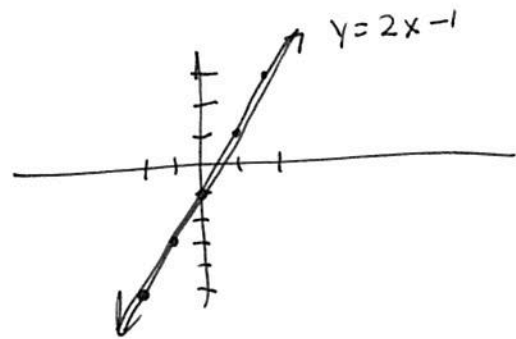
$(-8, 3) \rightarrow \text{II}$
 $(-4, 6) \rightarrow \text{II}$
 $(0, -6) \rightarrow \text{y-axis}$
 $(6, 9) \rightarrow \text{I}$



$(-3.5, 0) \rightarrow \text{x-axis}$
 $(-1.5, 2) \rightarrow \text{II}$
 $(0, 1.5) \rightarrow \text{y-axis}$
 $(2.5, -1.5) \rightarrow \text{IV}$

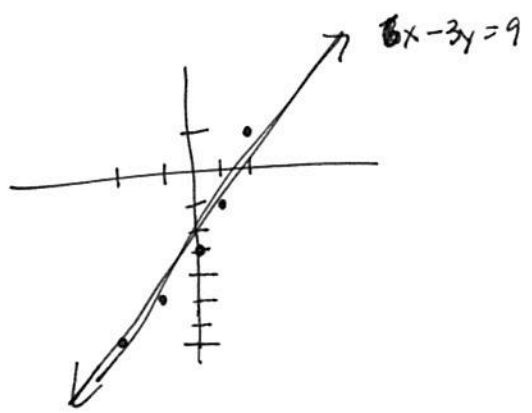
5a.

X	Y
-2	-5
-1	-3
0	-1
1	1
2	3



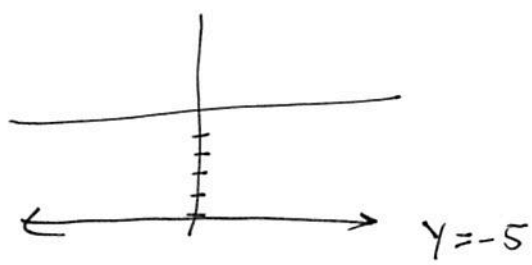
b.

X	Y
-2	-7
-1	-5
0	-3
1	-1
2	1



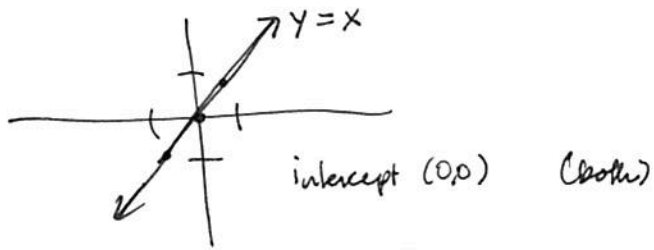
c.

X	Y
-2	-5
-1	-5
0	-5
1	-5
2	-5

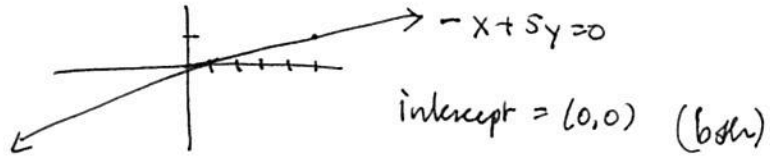


6a.

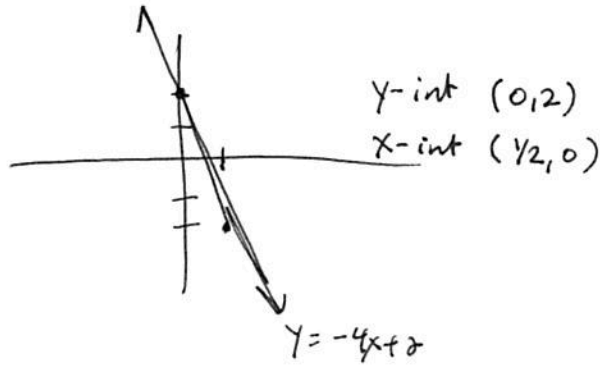
x	y
-1	-1
0	0
1	1



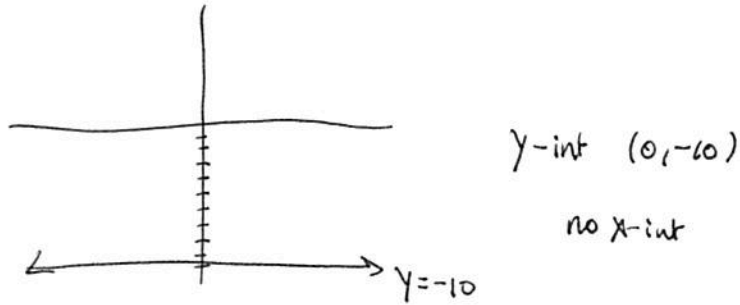
b. $y = 1/5x$
 $-x + 5y = 0$



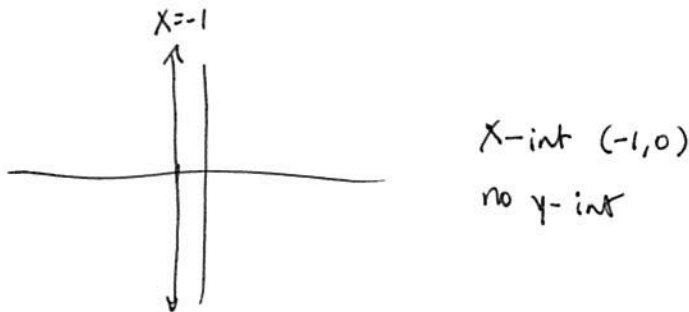
c. $y = -4x + 2$



d. $y = -10$

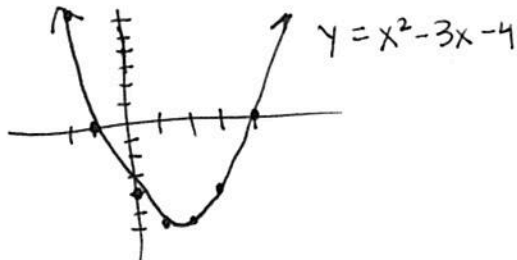


e. $x = -1$



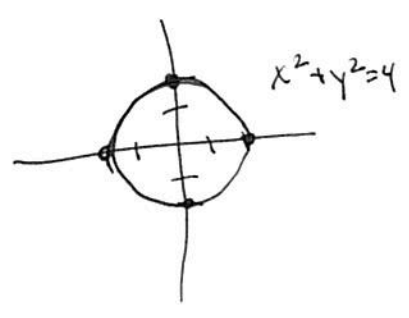
7a.

x	y
-2	6
-1	0
0	-4
1	-6
2	-6
3	0



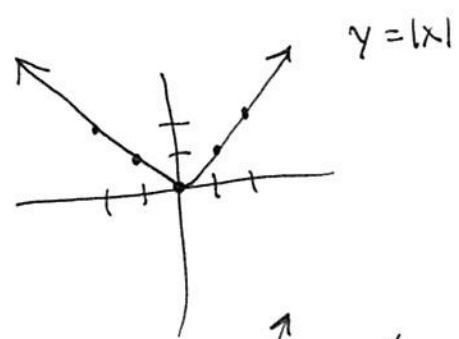
7b.

x	y
-2	0
-1	$\pm\sqrt{3}$
0	± 2
1	$\pm\sqrt{3}$
2	0



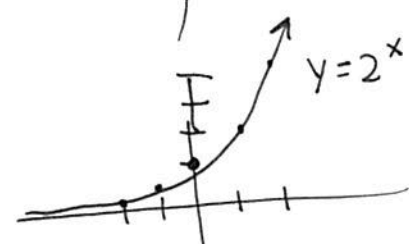
7c.

x	y
-2	2
-1	1
0	0
1	1
2	2



7d.

x	y
-2	1/4
-1	1/2
0	1
1	2
2	4



8a. $3x + 4y > 12$

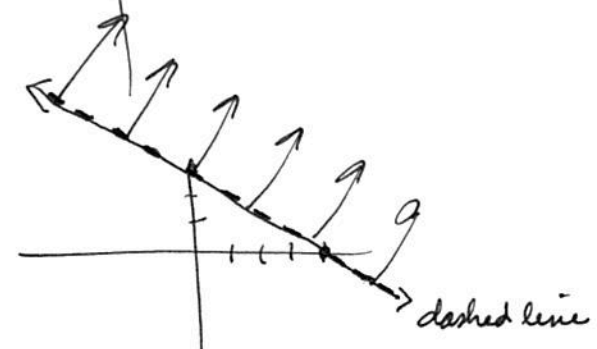
$3x > 12$

$x > 4$

$4y = 12$

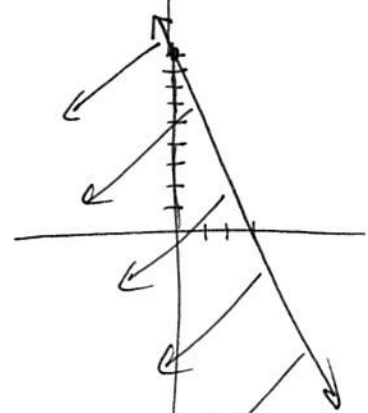
$y = 3$

$0 + 0 > 12$ false



8b. $y \leq -3x + 9$

$0 \leq 0 + 9$ true



8c. $y > 10$

