1.1/1.2 Re-Teach Worksheet
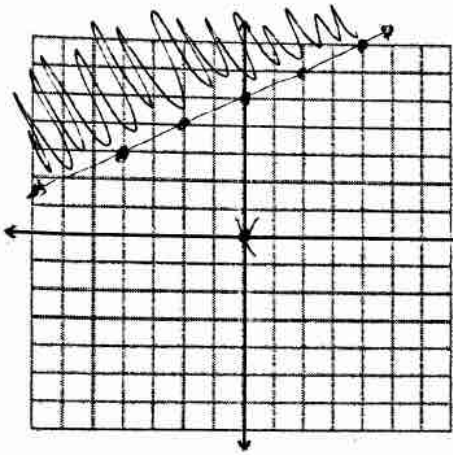## Intermediate Algebra

Name ___Key___

1.1 - *I can understand how to represent a region on a graph with an inequality.*
1.2 - *I can understand real-world situations that can be modeled as linear relationships with constraints.*
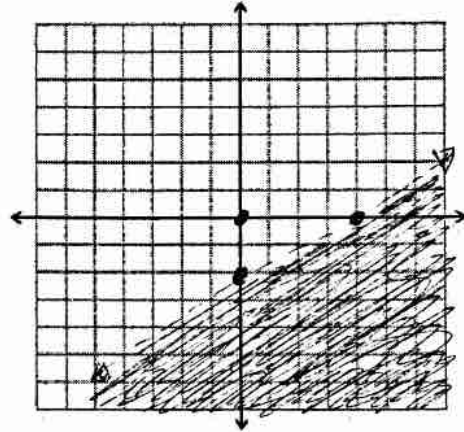
Graph the following inequalities.

1. $y \geq \frac{1}{2}x + 5$

$m = \frac{1}{2}$
$b = 5$

test:
$(0,0)$

$0 \geq \frac{1}{2}(0) + 5$

$0 \geq 0 + 5$

$0 \geq 5$

False

2. $2x - 4y > 8$
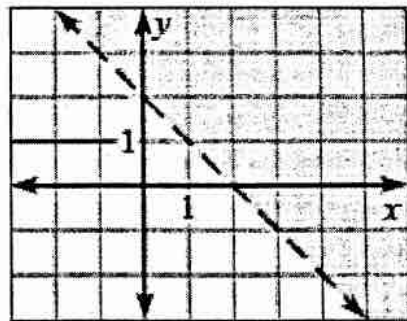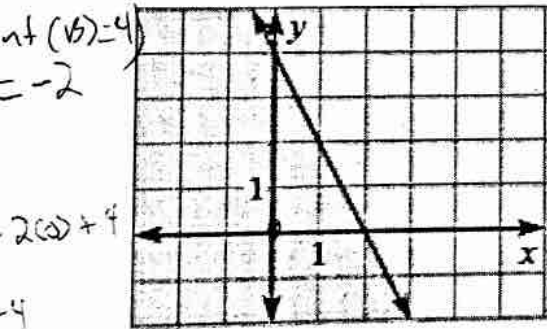
X	Y
0	-2
4	0

$\frac{-4y}{-4} > \frac{8}{-4}$

$y = -2$

$\frac{2x}{2} > \frac{8}{2}$

test
$(0,0)$

$2(0) - 4(0) > 8$

$0 \overset{?}{>} 8$

False

Write an inequality for each graph.

3. ___$Y \leq -2x + 4$___ ea $2x + y \leq 4$

$nt (b) = 4$
$= -2$

$2(0) + 4$

-4

4. ___$y > -x + 2$ / $x + y > 2$___

5. Graph $2x - 5y > 10$.
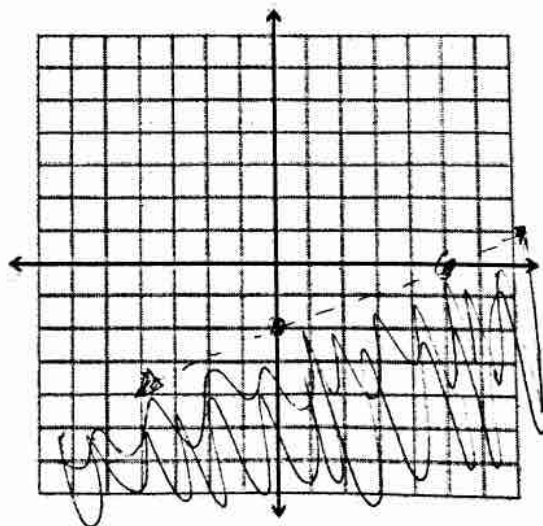Which of the ordered pairs is **NOT** a solution of the inequality?

a) (2, -2)

c) (3, -1)

b) (5, -1)

d) (0, -2)

X	Y
0	-2
5	0

$(0, 0)$
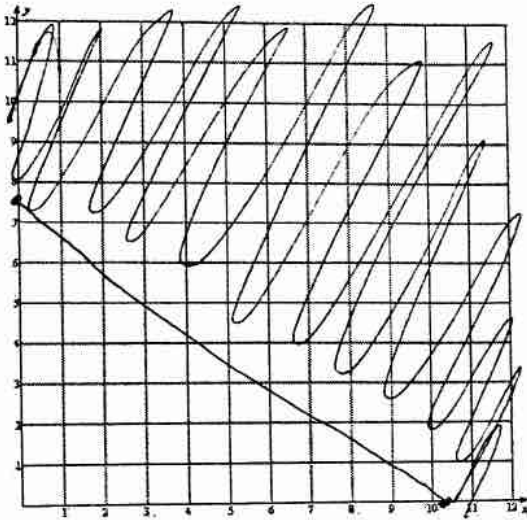
$2(0) - 5(0) > 10$

$0 > 10$

False

1.1/1.2 Re-Teach Worksheet
Intermediate Algebra

Name _____

6. Tickets for the school play cost $5 per student and $7 per adult. The school wants to earn at least $5400 on each performance.

    a.   Write an inequality that represents this situation $5x + 7y \geq 5400$

    b.   Graph the inequality:

    c.   Choose a point that **IS** a solution to the inequality. **EXPLAIN** what it means in the context of the problem.

$$(1100, 100)$$
$$\quad\quad x \quad\quad y$$

1100 student tickets

100 per adults

X	Y
1096	0
0	771