

Names: _____

Date: _____

Directions for Linear Inequality Activity:

- 1) Identify the slope and y-intercept of each inequality and write in 2nd column.
- 2) Determine if each ordered pair is a solution to the linear inequality. Show your work and write 'yes' or 'no' in 3rd column.
- 3) Graph each inequality on the graph paper and shade using the (0, 0) test to check your answers.
- 4) For #10, write the linear inequality that represents the graph.
- 5) For #11, graph both linear inequalities on the same coordinate plane. Can you identify the overlapping region? Can you name a solution (ordered pair) that satisfies both these conditions?

Equation	Slope and y-intercept	Test Point
1. $Y > 6x - 2$	$m =$ $b =$	(2, -3)
2. $Y > \frac{1}{3}x + 5$		(0, 7)
3. $Y \leq 3x - 1$		(3, 8)

<p>4. $Y \geq -4x + 3$</p>		<p>$(-3, 5)$</p>
<p>5. $y < 2$</p>		<p>$(-1, 4)$</p>
<p>6. $y \geq -x - 5$</p>		<p>$(-4, 1)$</p>

$$7. y < 3x + 2$$

(1, 5)

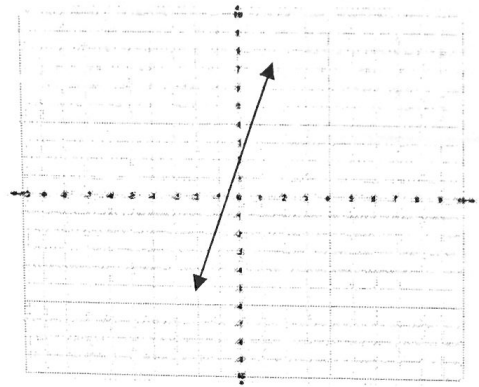
$$8. y \leq x$$

(-4, -2)

$$9. y \geq \frac{4}{5}x - 2$$

(5, 1)

10.



$$11. Y \geq -2x + 5$$
$$Y > x - 1$$

(0, 0) Test