

## Systems of Inequalities Color by Number

**Directions:** Solve each system of inequalities below. Then, if the given point is a possible solution, color in the number of the problem on the picture in a dark color. If the given point is *not* a solution, color the number of the problem on the picture in a light color. Use the same two colors for all your coloring. Graph each system on the graphs provided.

System of Inequalities	Point	Solution (yes or no)
1. $2y > 8x - 6$ $y \geq -2x + 3$	(1, 2)	_____
2. $5x + y \geq 3$ $y > -2$	(2, 3)	_____
3. $3y < 9$ $x + y \leq 1$	(2, 4)	_____
4. $y \geq x - 3$ $4x + 4y \geq -4$	(-3, 3)	_____
5. $x \leq -3$ $3y \geq -5x - 9$	(-4, -1)	_____
6. $4x - 3y < 9$ $\frac{1}{3}x + y > 2$	(0, 2)	_____
7. $x + y > 2$ $2x - y > 1$	(4, 2)	_____
8. $x + y \geq 2$ $2x + \frac{1}{2}y \geq -\frac{1}{2}$	(1, 0)	_____
9. $3y > -4x - 6$ $x - 3y \leq -9$	(0, 4)	_____
10. $\frac{1}{2}y < -1$ $-x - y \geq -1$	(5, -3)	_____
11. $6x + 2y \geq -6$ $2y \leq -x + 4$	(-1, 2)	_____
12. $x + y \geq -3$ $x + y \leq 3$	(-4, -2)	_____