

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)
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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)
