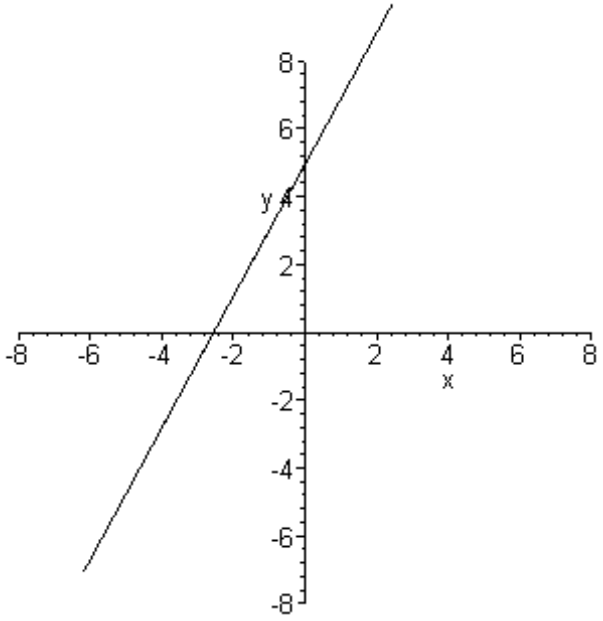
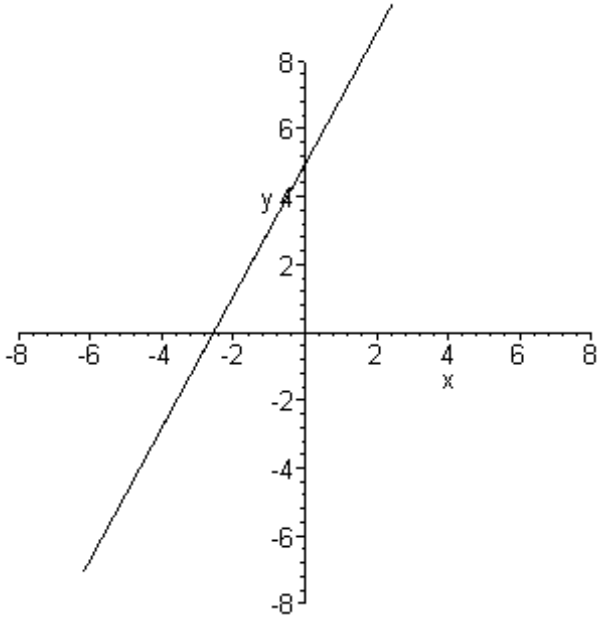
# Section 2.5 Linear Inequalities in Two Variables

Review: What is the relationship between the equation $y = -2x + 5$ and the graph of the equation shown below?




Review: What is the relationship between the equation $y < -2x + 5$ and the graph of the equation shown below?



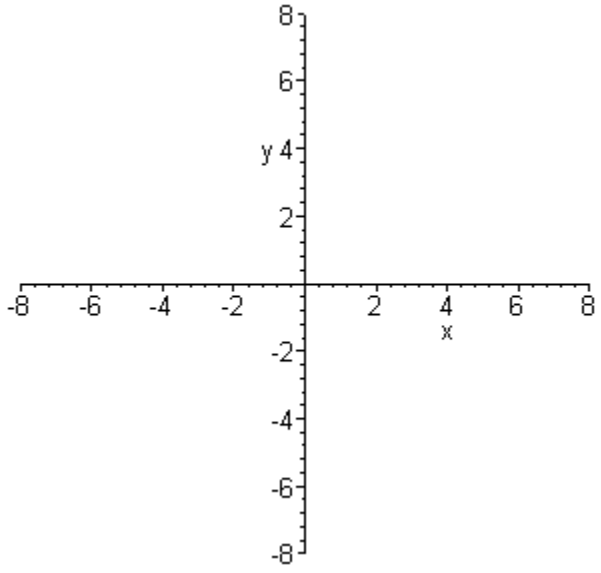
Solve the inequality $2x + 3y \leq -2$.

Will the graph of the solution set require a dashed or solid line?

Write the inequality in the form: $y \leq \text{or} \geq mx + b$

Find two points that lie on the boundary line for the solution set.

Graph the solutions set by shading the appropriate side of the boundary line.



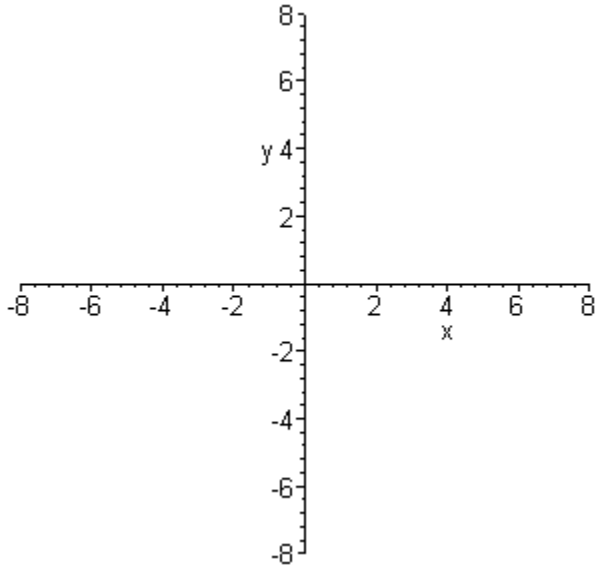
Solve the inequality $\frac{3x+y}{12} \geq \frac{1}{4}y - \frac{1}{3}x$.

Will the graph of the solution set require a dashed or solid line?

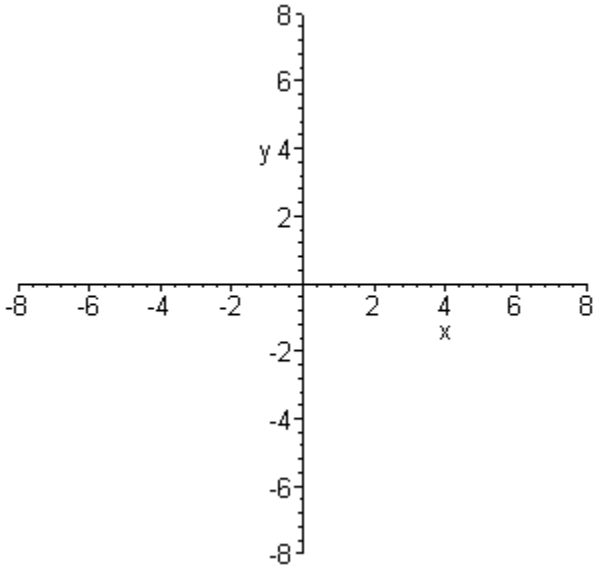
Write the inequality in the form: $y \leq \text{or} \geq mx + b$

Find two points that lie on the boundary line for the solution set.

Graph the solutions set by shading the appropriate side of the boundary line.



Solve the compound inequality $2x + y < 5$ and $3x - 2y \geq -2$.



Solve the inequality $|3x + 4y| > 2$