

Name: \_\_\_\_\_

Date: \_\_\_\_\_

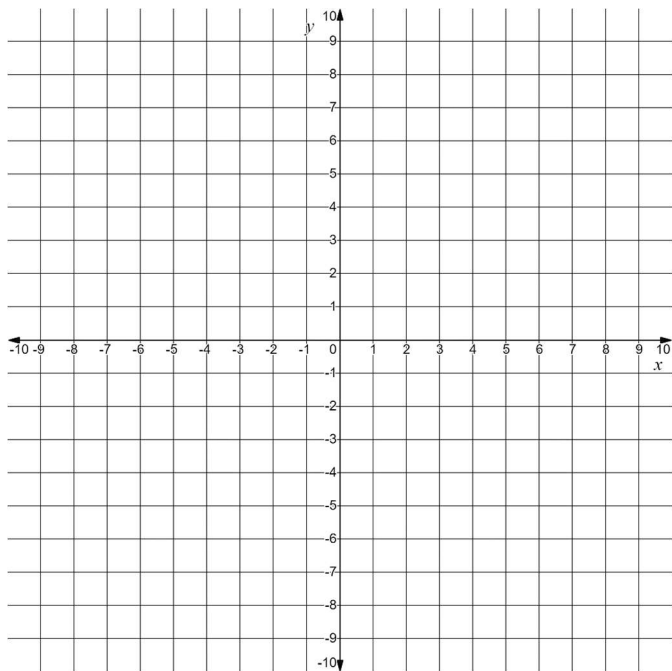
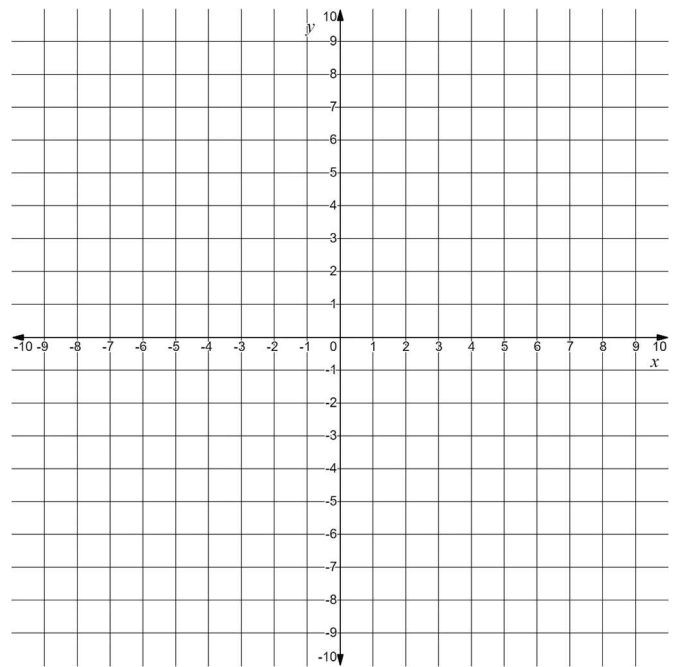
<b>Learning Goal 9.1</b>	Solving linear inequalities.
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Graphing Linear Inequalities

Solution Region

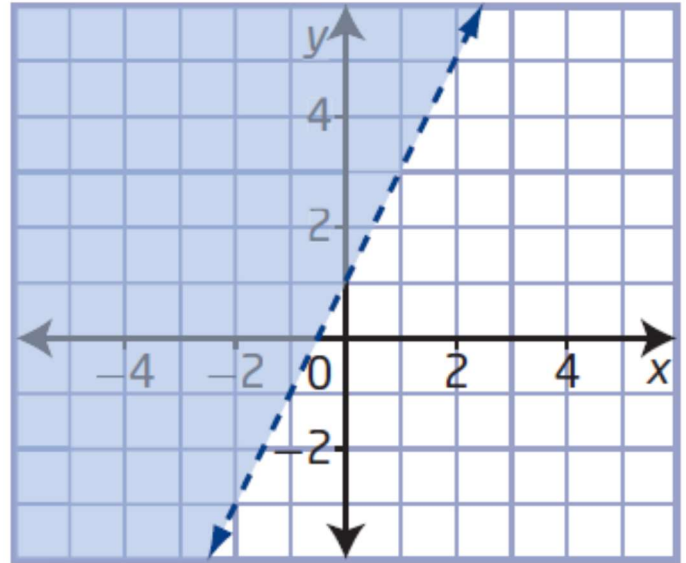
Boundary

**Example** Graph  $2x + 3y \leq 6$  and determine whether  $(-2, 4)$  is part of the solution.



**Example** Graph  $10x - 5y > 0$ .

**Example** Write an inequality to represent the graph.



**Example** Sam has \$30 to buy snacks for his class. Apples cost \$0.75 each and muffins are \$1.25.

- a. Define the variables and write a linear equation to represent the possible combinations of snacks that he can purchase.

- b. Are there any restrictions on the variables?  
Explain.

- c. Graph your equation and shade the solution region.

