Lesson 7.2: Systems of Linear Inequalities

Learning Goal:
Graph systems of linear inequalities.

Notes

A system of linear inequalities is made up of _____.
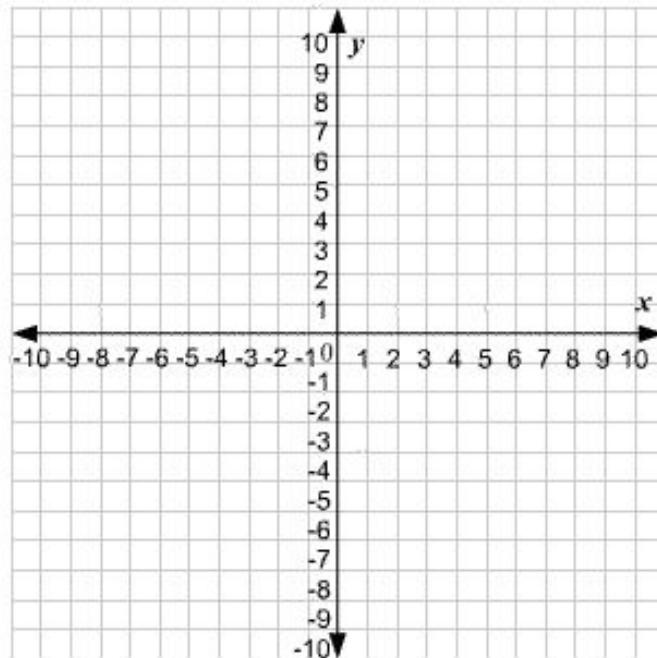
A solution to a system of linear inequalities is _____

_____.

Graphing a System of Linear Inequalities

Steps:	**Sketch the solution to the system of linear inequalities:**
▪ Graph the 1st inequality. ▪ Graph the 2nd inequality. ▪ The solutions for a system of inequalities are ALL the ordered pairs where the shaded regions OVERLAP. ▪ If the shaded regions do not overlap, then there is NO solution.	$y < 2x - 3$ $2x + y > 2$

Check your work using a test point! Choose an ordered pair where the shaded regions overlap. Make sure the values for x and y result in TRUE statements for BOTH linear inequalities.

Word of Warning:
If the shaded regions do not overlap, then the system of inequalities has NO solution.