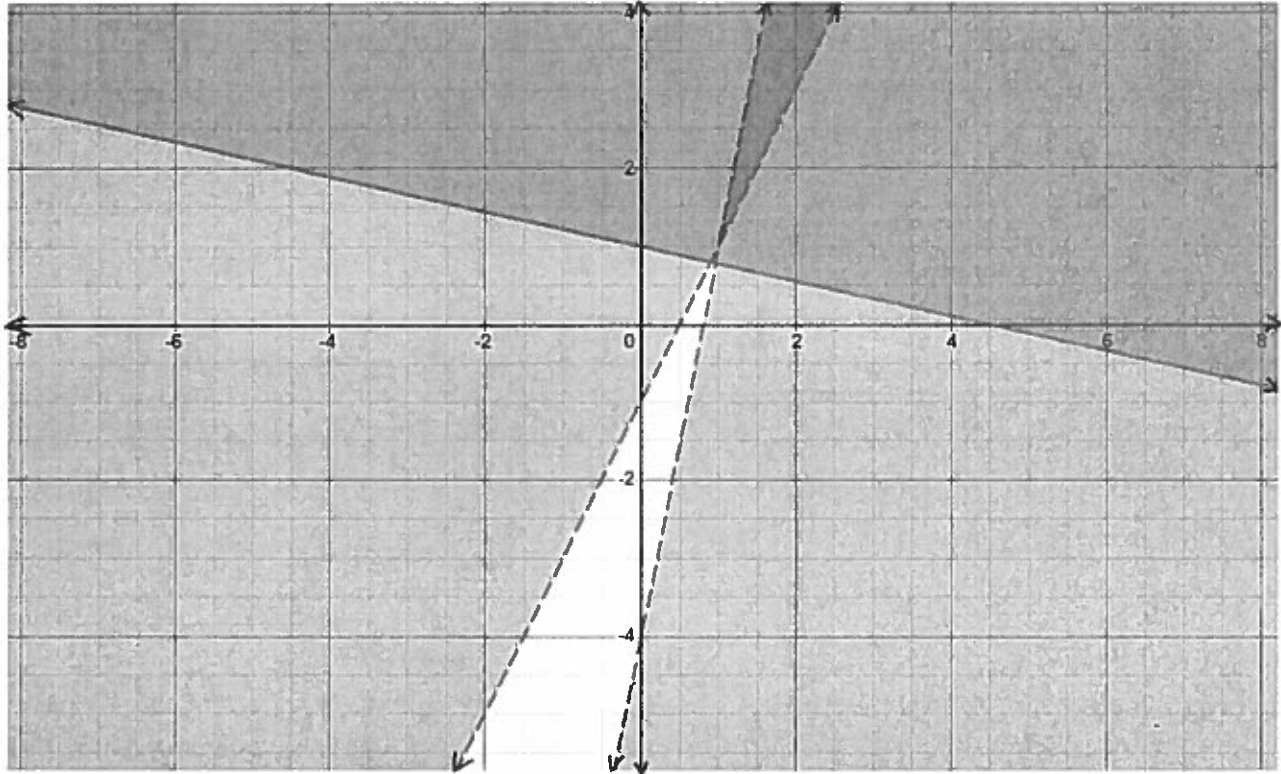


Systems of Linear Inequalities

Using the knowledge you have, write a system of inequalities for the given solution region:



- First of all, we can tell that there are 3 distinct lines
- We can write the system of inequalities by focusing on one line at a time
- The line closest to the left in slope-intercept form is $y > 2x - 1$
- The line is dashed \rightarrow not included in the solution, the solution region is above the line $\rightarrow (>)$
- The line closest to the right in slope-intercept form is $y < 5x - 4$
- The line is dashed \rightarrow not included in the solution, the solution region is below the line $\rightarrow (<)$
- The top line in slope-intercept form is $y \geq -\frac{2}{9}x + 1$
- The line is solid \rightarrow it is included in the solution, the solution region is above the line $\rightarrow (\geq)$
- The system of inequalities is:
 - $y > 2x - 1$
 - $y < 5x - 4$
 - $y \geq -\frac{2}{9}x + 1$