Conditions

Graph the inequality in a coordinate plane. 24. x+y> or equal to -2. Also 3x-2y>2. Can you show me how to do these and what the graphs would look like?

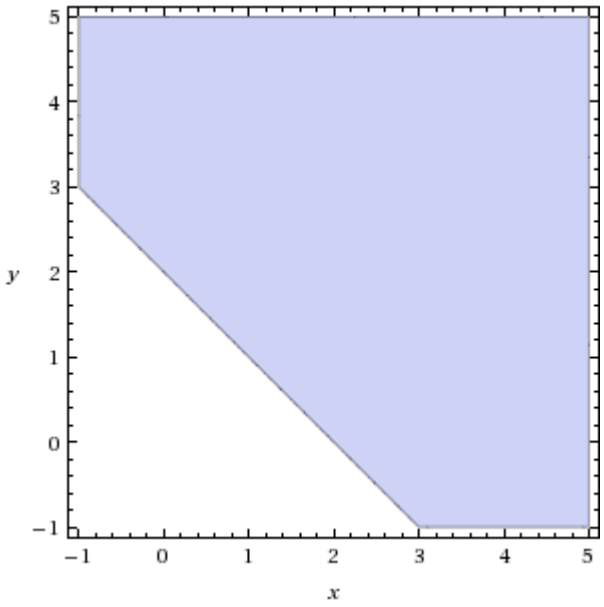
Solution

$$\begin{cases} x+y \geq 2 \\ 3x-2y > 2 \end{cases}$$

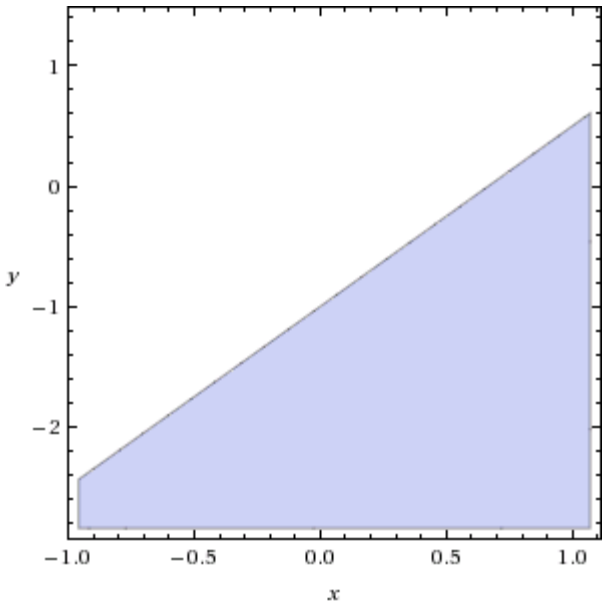
The first inequality is all the half of a plane, above the line x+y=2, include the points of this line.

The second inequality is all the half of a plane, above the line 3x-2y=2, exclude the points of this line.

The first graph is



The second graph is



The system graph is the interception of 1st and 2nd graph: