

## D117: 7.2 System of linear inequalities in two variables

### Method

1. For each inequality, graph the boundary line and test a point NOT ON THAT LINE to determine which half plane satisfies the inequality.
2. The desired set is the intersection of all the half planes determined in step 1.

### Example.

Graph the following set and compute the corner points.

$$\begin{cases} -x + 8y \leq 13, \\ -4x - 13y \leq 7, \\ x + y \leq 5, \\ x + 4y \leq 21 \end{cases}$$

