

Step-1

Feasible set: A feasible set is composed of the solutions to a family of linear inequalities, and a feasible point maximizes or minimizes a certain cost function.

Step-2

To sketch the feasible set with following constraints:

$$x + 2y \geq 6$$

$$2x + y \geq 6$$

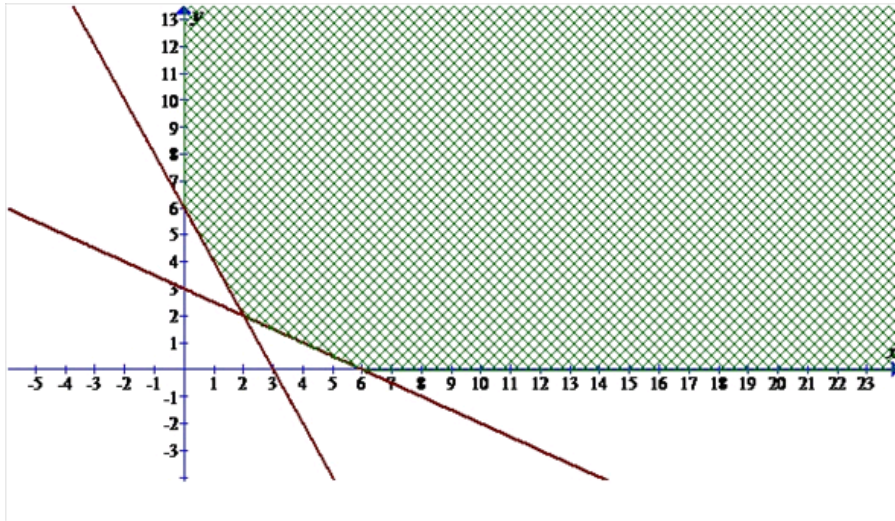
$$x \geq 0$$

$$y \geq 0$$

Also, to determine the points that lies at the three corners of this set.

Step-3

Following sketch gives the feasible set:



Here shaded region denotes the feasible region.

Step-4

Therefore, three corner sets are as follows:

$$(2, 2), (0, 6), (6, 0)$$