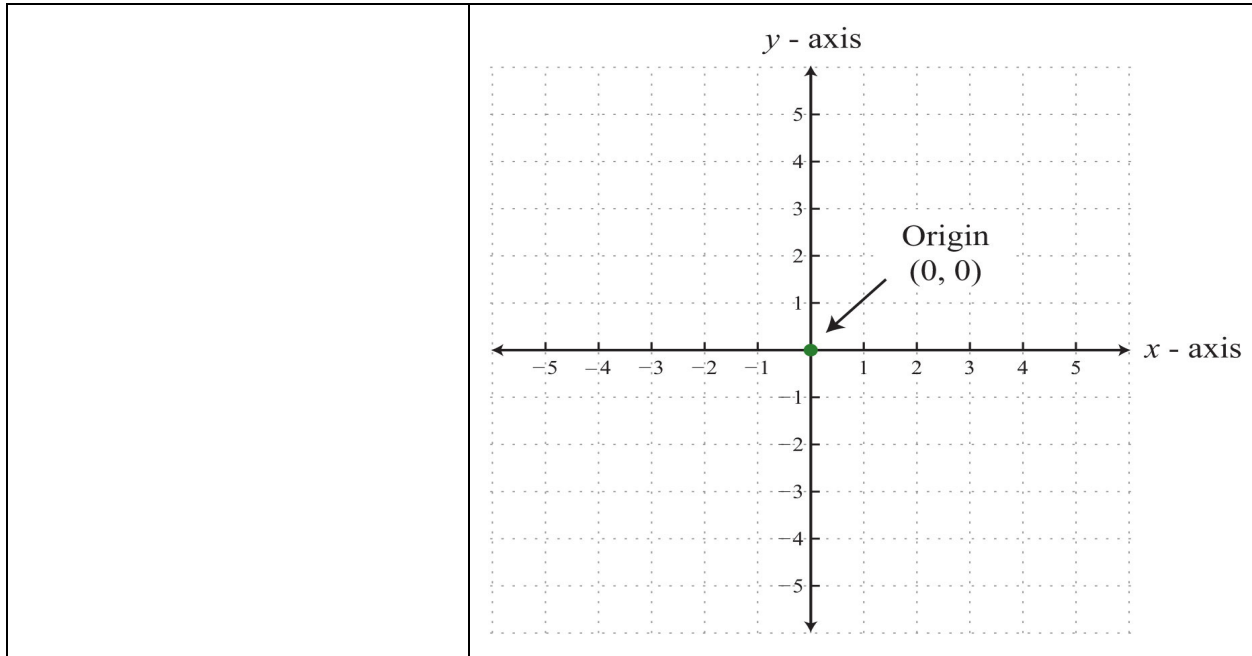# 6.2
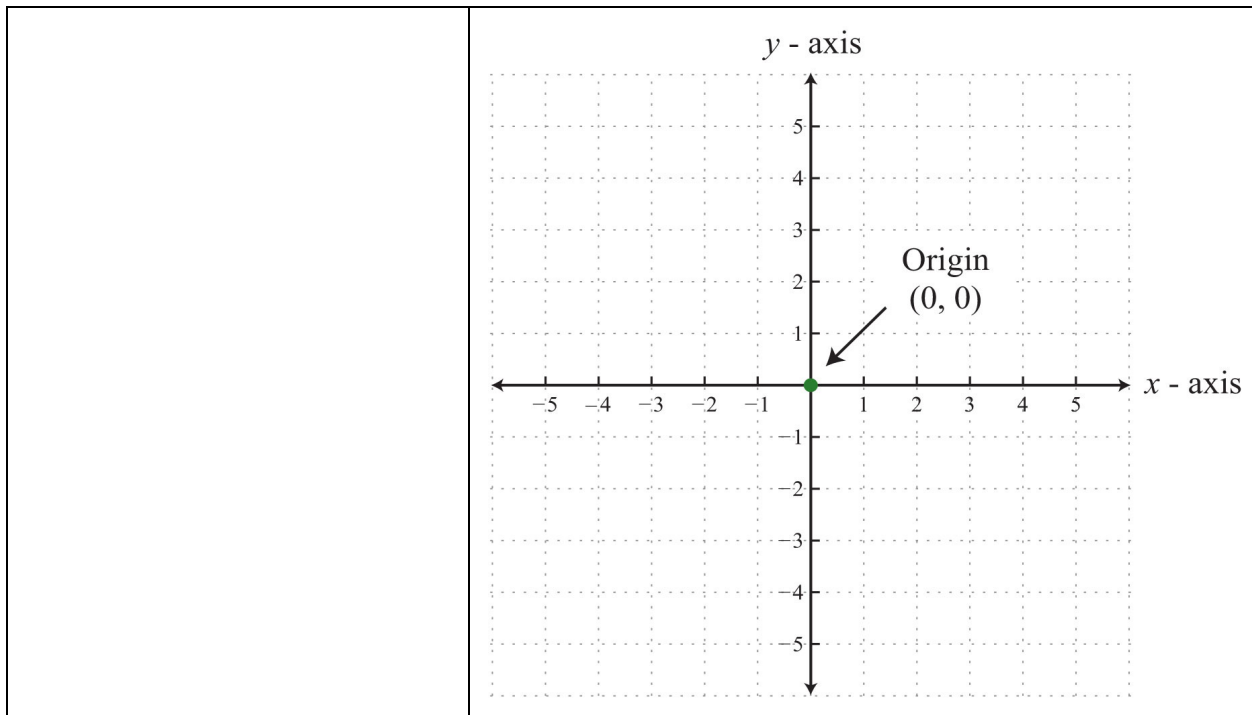# Graphing a System of Linear Inequalities
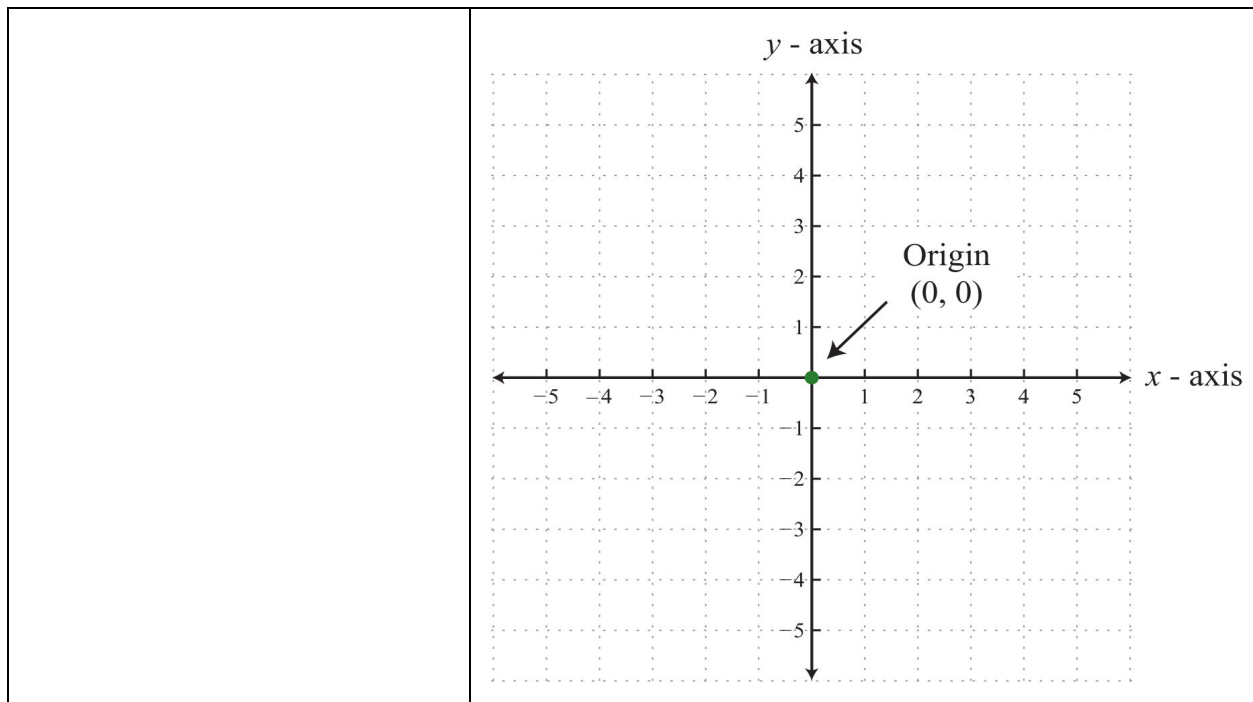
A linear equation in two variables is……….?
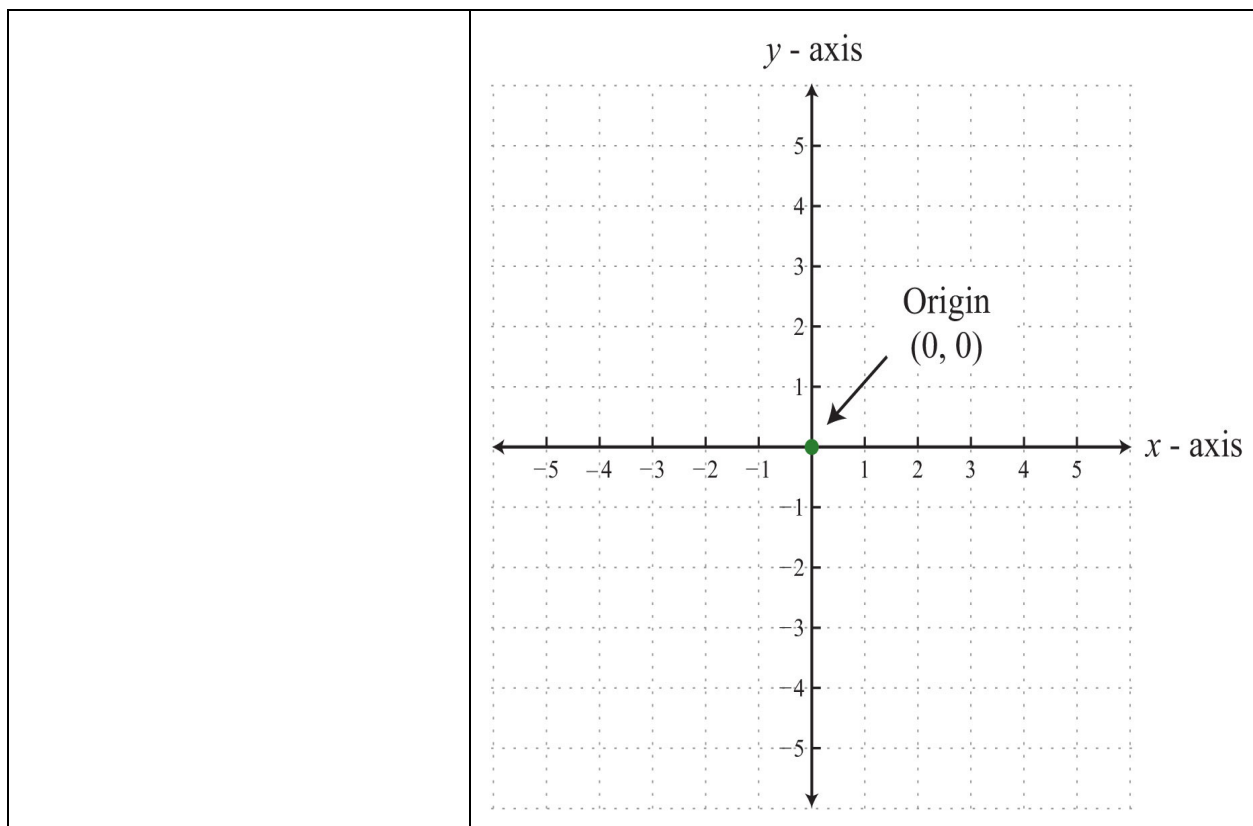

A system of linear equations in two variables is……….?

A linear inequality in two variables is……….?

y - axis

Origin
(0, 0)

x - axis

A system of linear equalities in two variables is……….?

y - axis

Origin
(0, 0)

x - axis

Ex.1. Graph the given system of linear inequalities.

{ (x, y) | x - y ≥ 15, x ∈ R, y ∈ R }

{ (x, y) | y ≥ 10, x ∈ R, y ∈ R }

Step. 1 Graph each inequality on different coordinate plane.
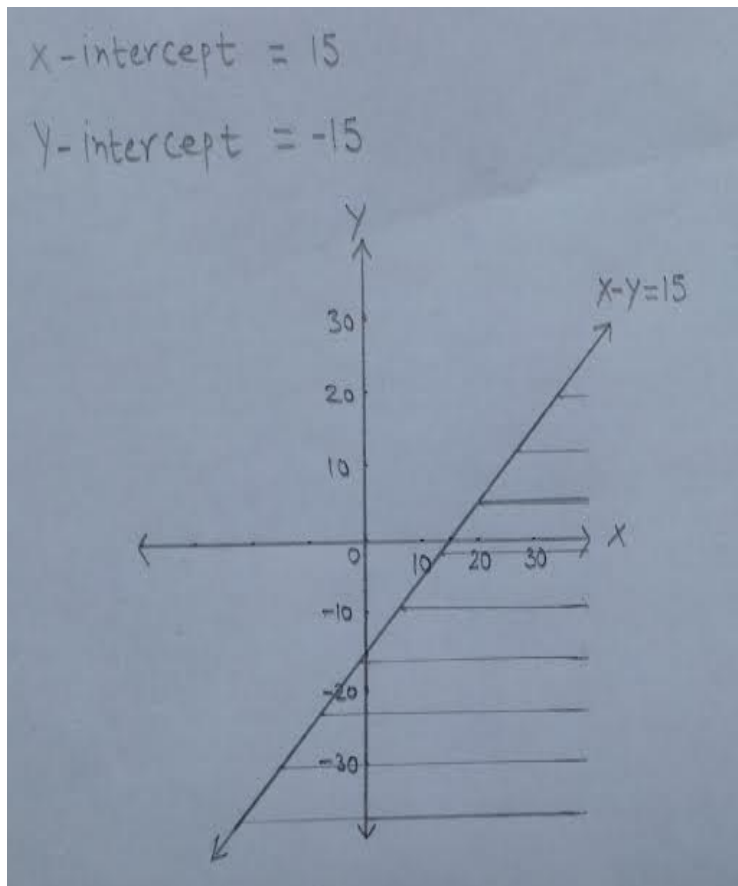
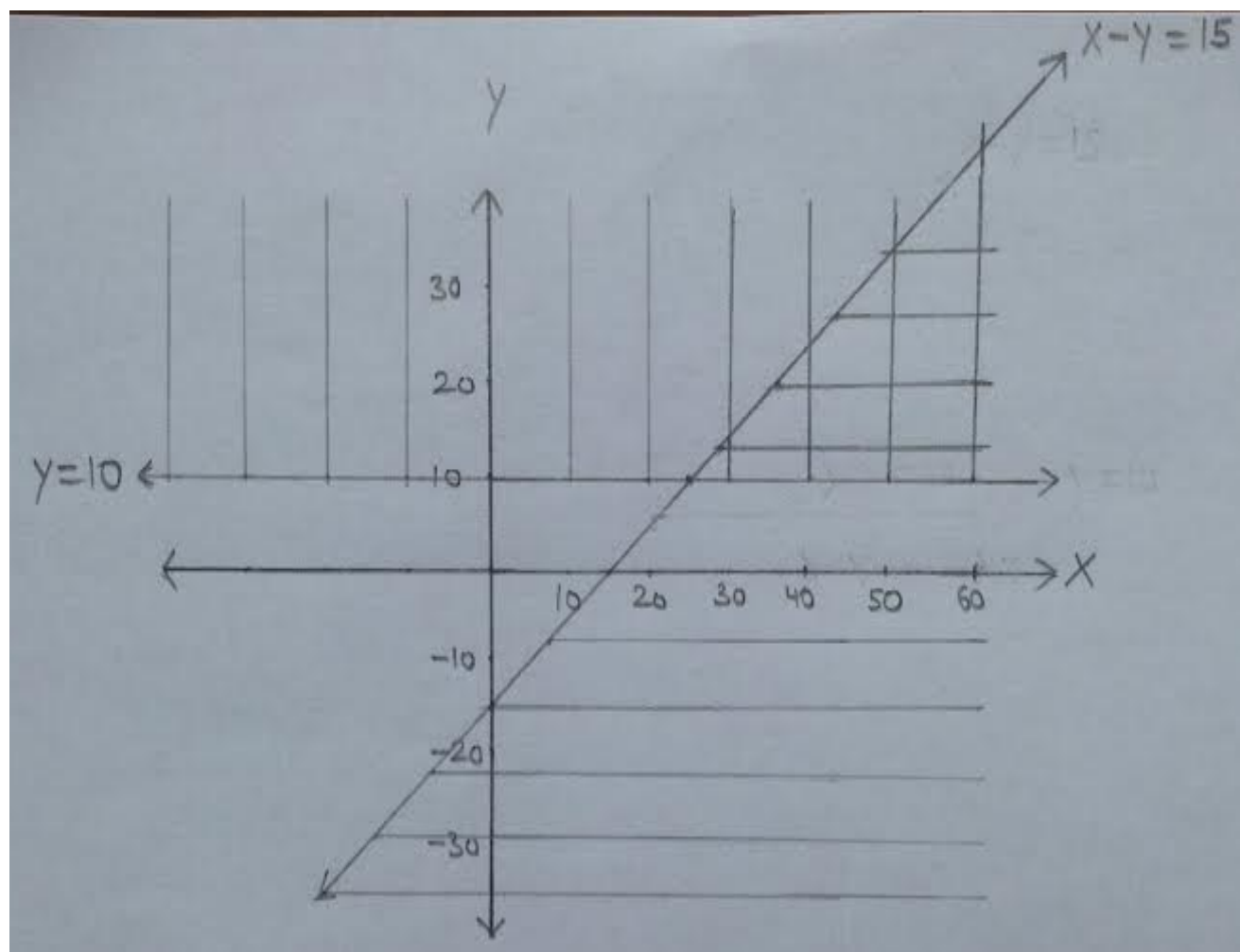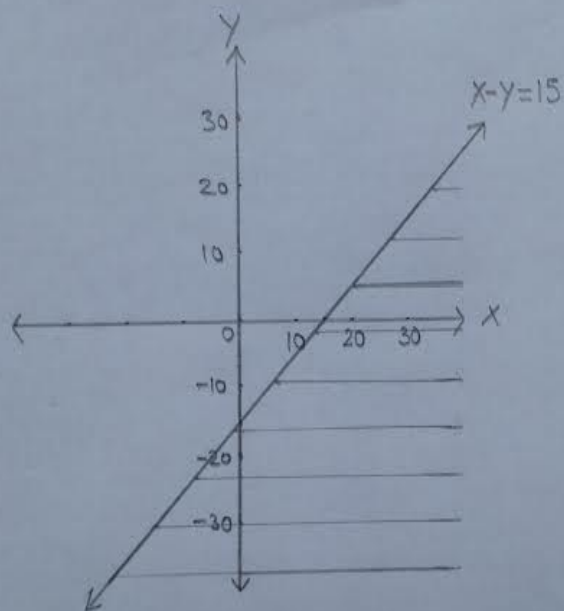| Graph of x - y ≥ 15	Graph of y ≥ 10
Graph the given inequality following exercise 6.1	Graph the given inequality following exercise 6.1
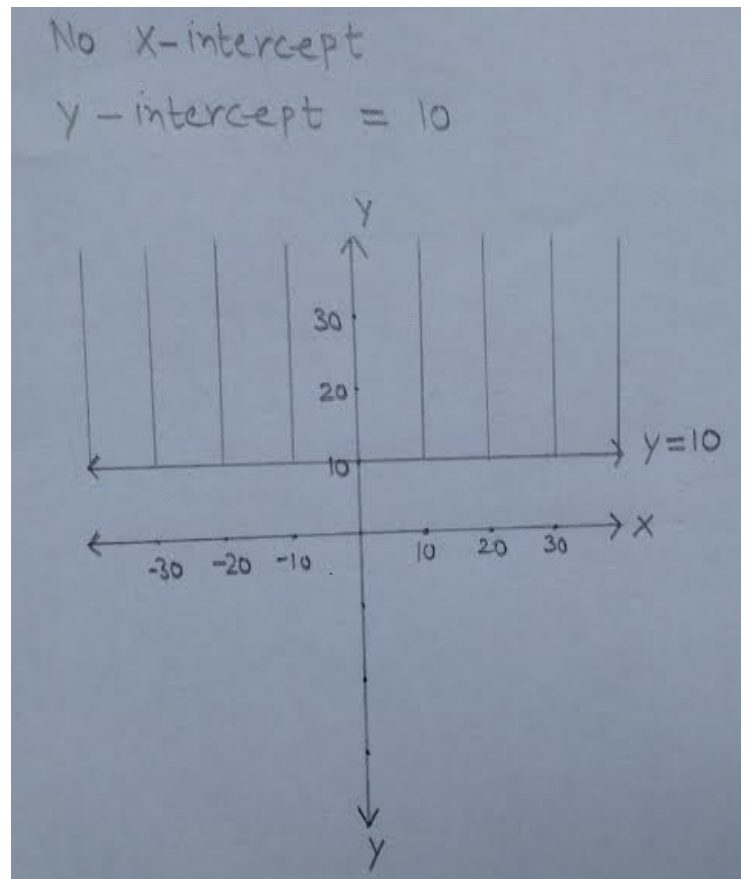
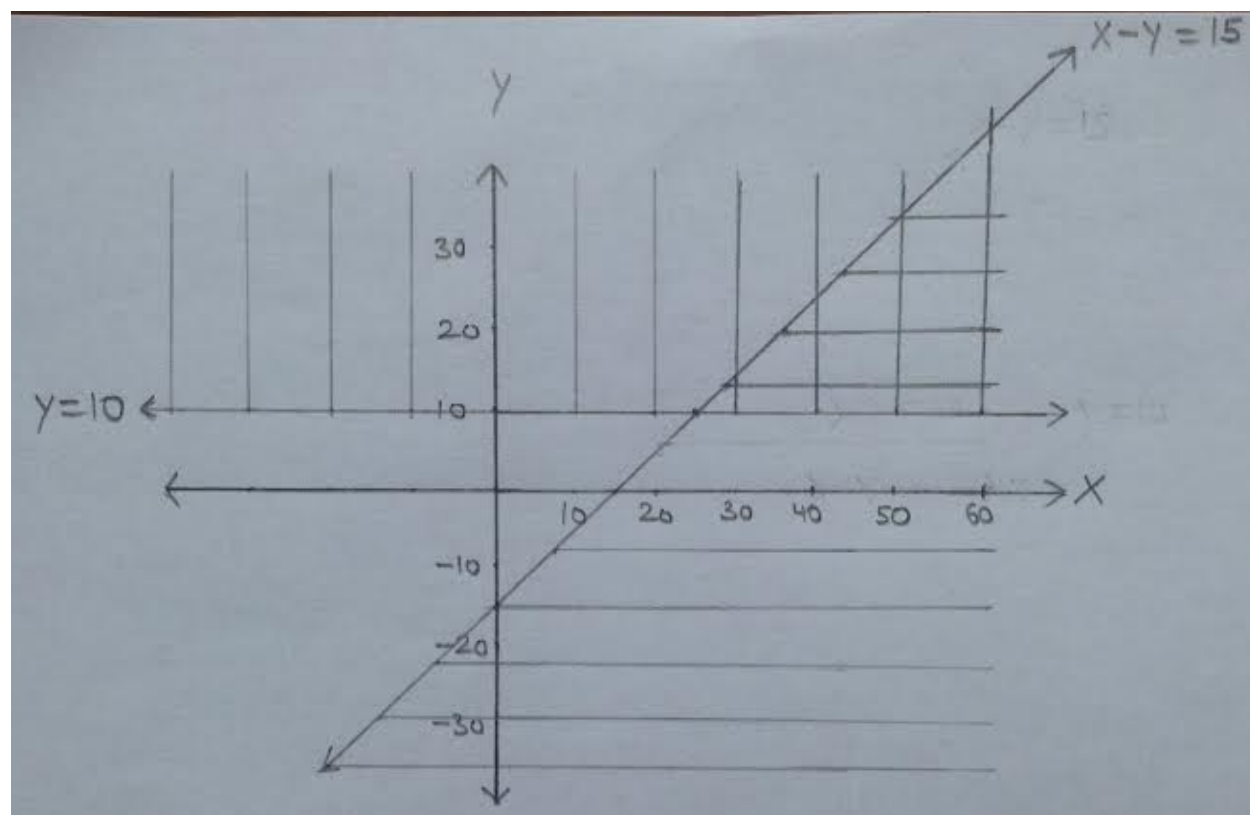**Step. 2. Graph both inequalities on same coordinate plane.**

x-intercept = 15

y-intercept = -15

X-Y=15

No X-intercept

y - intercept = 10

y=10

X-Y = 15

y=10
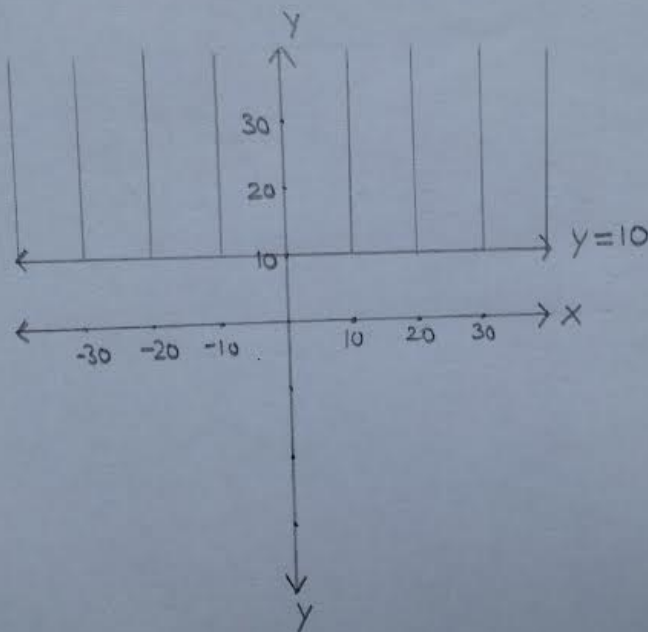
Classwork # 1, 2 (P.307)

Homework # 4 (P.318)