

## Position of a Point with respect to a Line.

Let the given line be  $ax + by + c = 0$  and observing point is  $(x_1, y_1)$ , then

- (i) If the same sign is found by putting in equation of line  $x = x_1, y = y_1$  and  $x = 0, y = 0$  then the point  $(x_1, y_1)$  is situated on the side of origin.
- (ii) If the opposite sign is found by putting in equation of line  $x = x_1, y = y_1$  and  $x = 0, y = 0$  then the point  $(x_1, y_1)$  is situated opposite side to origin.