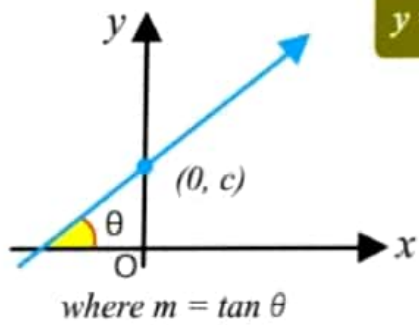


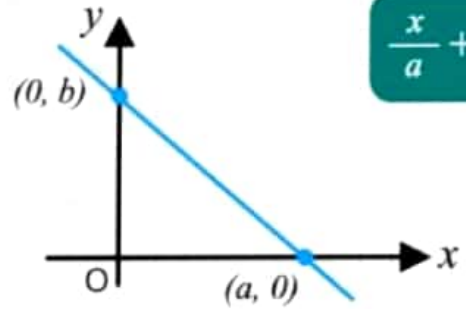
Straight line

1 Slope - Intercept Form



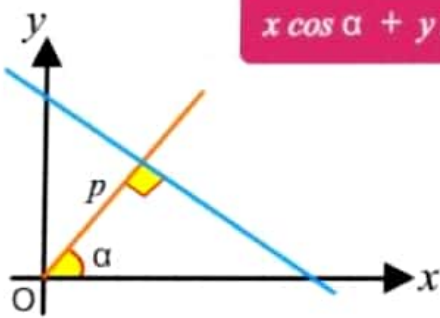
$$y = mx + c$$

2 Double Intercept Form



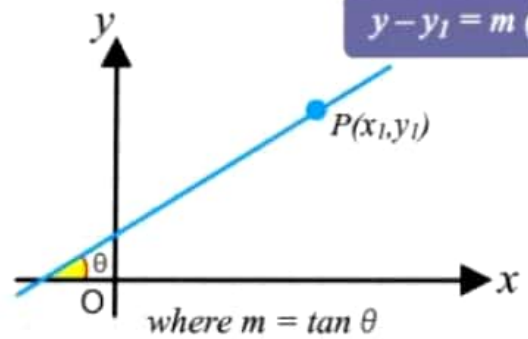
$$\frac{x}{a} + \frac{y}{b} = 1$$

3 Normal Form



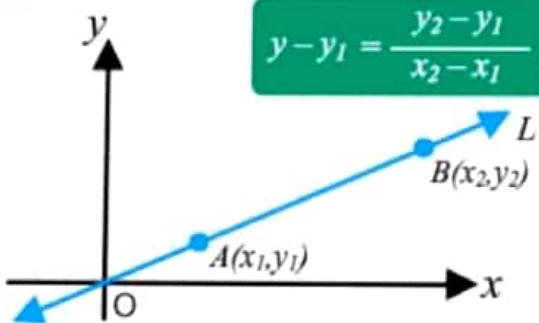
$$x \cos \alpha + y \sin \alpha = p$$

4 Slope - Point Form



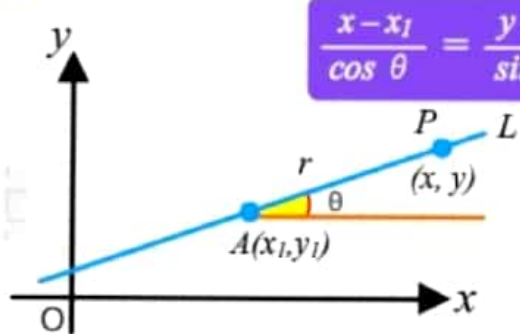
$$y - y_1 = m(x - x_1)$$

5 Two Point Form



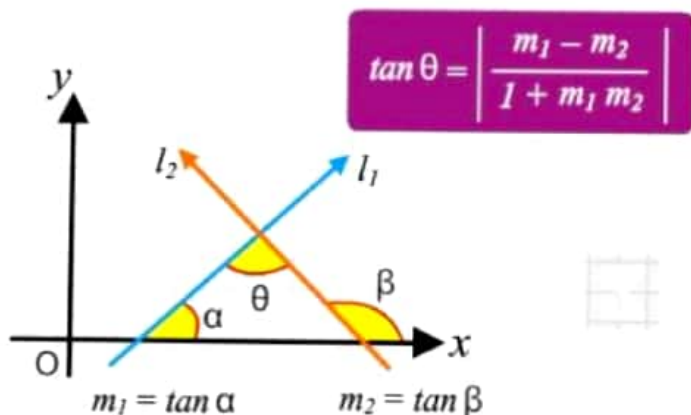
$$y - y_1 = \frac{y_2 - y_1}{x_2 - x_1} (x - x_1)$$

6 Parametric Form



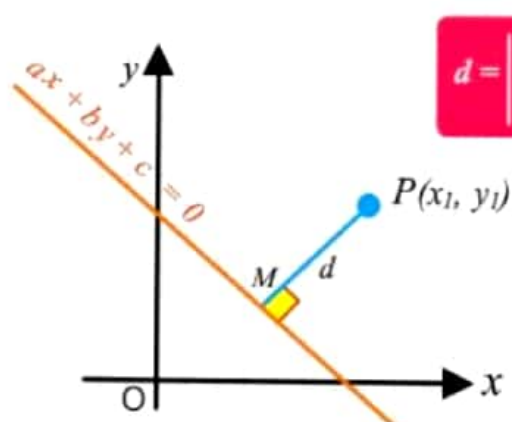
$$\frac{x - x_1}{\cos \theta} = \frac{y - y_1}{\sin \theta} = r$$

7 Angle between two Straight lines



$$\tan \theta = \left| \frac{m_1 - m_2}{1 + m_1 m_2} \right|$$

8 Distance between Point & line



$$d = \left| \frac{ax_1 + by_1 + c}{\sqrt{a^2 + b^2}} \right|$$

