

EE5609 Matrix Theory

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1 Assignment-1

1.1 Problem

Lines and Planes (26) : Find the slope of the line, which makes an angle of 30° of $y - axis$ measured anti clockwise.

1.2 Solution

If θ is the angle measured with respect to $x - axis$ anti clockwise to a straight line, then Slope of that line is $\tan \theta$.

Let a straight line passing through origin makes an angle of 30° of $y - axis$ measured anti clockwise

then

$$\theta = 90^\circ + 30^\circ = 120^\circ$$

$$\therefore \text{Slope of the line} = \tan 120^\circ = -\sqrt{3}$$