

Coordinate Geometry

The equation of a given line is given by $2x + 3y = 12$

1. The gradient of the line is =
2. The intercept on the x-axis is =
3. The intercept on the y-axis is =
4. Find the area of the triangle OAB , where O is the origin and A and B are the points where the line cuts the x-axis and the y-axis respectively.

Given that the equations of two lines L_1 and L_2 are :

$$L_1 : 2x + y = 8 \text{ and}$$

$$L_2 : 6y - mx = 3$$

5. State the gradient of the line
6. If $L_1 \parallel L_2$ find m
7. If $L_1 \perp L_2$ find m

Coordinate Geometry

Answers

The equation of a given line is given by $2x + 3y = 12$

1. The gradient of the line is $= -\frac{3}{2}$
2. The intercept on the x-axis is $= 6$
3. The intercept on the y-axis is $= 4$
4. Find the area of the triangle OAB , where O is the origin and A and B are the points where the line cuts the x-axis and the y-axis respectively. **12 sq. Units**

Given that the equations of two lines L_1 and L_2 are :

$$L_1 : 2x + y = 8 \text{ and}$$

$$L_2 : 6y - mx = 3$$

5. State the gradient of the line

-2

6. If $L_1 \parallel L_2$ find m

-12

7. If $L_1 \perp L_2$ find m

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