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 :
$L_1 : 2x + y = 8$ 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 :
$L_1 : 2x + y = 8$ 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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