1 The line L is parallel to $y = -2x + 1$ and passes through the point $(5, 2)$.

Find the coordinates of the points of intersection of L with the axes. [5]

2 A line has equation $3x + 5y = 12$. Find its gradient and the coordinates of the points where it crosses the axes. [4]
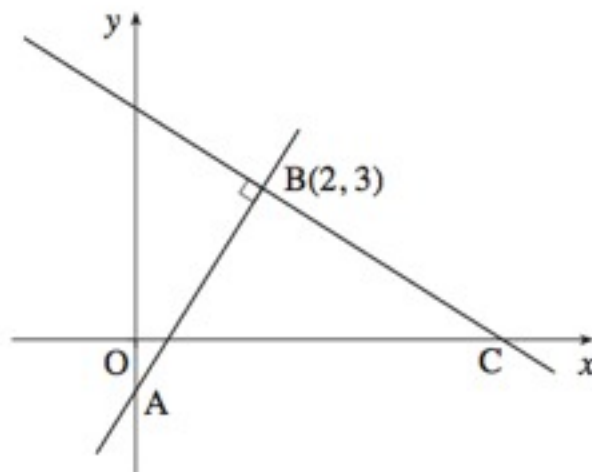
3

Fig. 7

The line AB has equation $y = 4x - 5$ and passes through the point $B(2, 3)$, as shown in Fig. 7. The line BC is perpendicular to AB and cuts the x-axis at C. Find the equation of the line BC and the x-coordinate of C. [5]

4 A line has equation $3x + 2y = 6$. Find the equation of the line parallel to this which passes through the point $(2, 10)$. [3]

5   Find, in the form $y = ax + b$, the equation of the line through $(3, 10)$ which is parallel to $y = 2x + 7$.   [3]

6   (i) Find the gradient of the line $4x + 5y = 24$.   [2]

(ii) A line parallel to $4x + 5y = 24$ passes through the point $(0, 12)$. Find the coordinates of its point of intersection with the x-axis.   [3]

7   (i) Find the points of intersection of the line $2x + 3y = 12$ with the axes.   [2]

(ii) Find also the gradient of this line.   [2]

8   Find the equation of the line passing through $(-1, -9)$ and $(3, 11)$. Give your answer in the form $y = mx + c$.   [3]

9   A line has gradient -4 and passes through the point $(2, 6)$. Find the coordinates of its points of intersection with the axes.   [4]