

Question 2

$$(-3, 2), y = 2x - 12$$

$$y = 2x - 12$$

$$y = mx + c$$

$$m_1 = 2$$

$$m_1 \cdot m_2 = -1$$

$$\frac{2}{2} \cdot m_2 = \frac{-1}{2}$$

$$m_2 = \frac{-1}{2}$$

$$y = -\frac{1}{2}x + c$$

$$2 = -\frac{1}{2}(-3) + c$$

$$2 = \frac{-3}{2} + c$$

$$c = \frac{1}{2}$$

$$\therefore y = -\frac{1}{2}x + \frac{1}{2}$$

Question 1

$$(2, -1), y = -\frac{3}{5}x - 2$$

$$y = -\frac{3}{5}x - 2$$

$$y = m, x + c$$

$$m = -\frac{3}{5}$$

$$m_1 = m_2$$

$$y = -\frac{3}{5}x + c$$

$$-1 = -\frac{3}{5}(2) + c$$

$$-1 = -\frac{6}{5} + c$$

$$-1 + \frac{6}{5} = -\frac{6}{5} + \frac{6}{5} + c$$

$$\frac{1}{5} = c$$

$$\therefore y = -\frac{3}{5}x + \frac{1}{5}$$

