

## Question 1

$$x = \frac{lx_1 - kx_2}{l-k}$$

$$k=3 \quad x_1=5$$

$$l=1 \quad x_2=15$$

$$x = \frac{1(5) - 3(15)}{1-3}$$

$$x = \frac{5 - 45}{-2}$$

$$x = 20$$

$$y = \frac{ly_1 - ky_2}{l-k}$$

$$l=1 \quad y_1=3$$

$$k=3 \quad y_2=-7$$

$$y = \frac{1(3) - 3(-7)}{1-3}$$

$$y = \frac{3 + 21}{-2}$$

$$y = -12$$

The coordinate of the point

$$(20, -12)$$