



Date :

الـ) $\begin{cases} 9 = 3x - y \\ -4 = x + 2y \end{cases} \rightarrow \begin{cases} 9 = 3x - y \\ 12 = -3x - 6y \end{cases} \rightarrow y = 3 \quad x = \frac{12}{2} = 6$ (1)

$11 = -7y \rightarrow y = 3 \quad \frac{x}{y} = \frac{-2}{1}$

$\rightarrow \frac{1}{x} - \frac{1}{y} = -1 \rightarrow \frac{1}{x} = \frac{1}{y} - 1$ (2)

$\frac{1}{x} - \frac{1}{y} = -1 \rightarrow 1(\frac{1}{y} - 1) - \frac{1}{y} = -1 \rightarrow \frac{1}{y} - 1 - \frac{1}{y} = -1$

$\rightarrow \frac{1}{y} = 0 \rightarrow y = -1, x = -\frac{1}{2} \quad \frac{x}{y} = \frac{-\frac{1}{2}}{-1} = \frac{1}{2}$

الف) $(1, \alpha+1) = (1, -2) \rightarrow \alpha+1 = -2 \rightarrow \alpha = -3$ (3)

$f(\alpha) + 2f(\beta) = 3f(\gamma) \rightarrow 2\alpha + 1\beta = 3\alpha + 3\gamma = -9 \rightarrow -6 + 1\beta = -9$

$\beta = 0$

$m^2 - 3m = -2 \rightarrow m^2 - 3m + 2 = 0 \quad \begin{cases} m=1 \\ m=2 \end{cases}$ (4) (5)

$m=1 \rightarrow (2, 6) = (2, 4) \quad \text{خط}$

$m=2 \rightarrow (2, 6) = (3, 6) \quad \text{خط}$

$\checkmark \quad \alpha \quad \checkmark \quad \text{خط}$ (6)

P

Date :

Subject :

$$\alpha + b = r\alpha \rightarrow \alpha = b$$

$$\alpha - r\alpha + 1 = r\alpha \rightarrow -r\alpha + 1 =$$

$$\alpha = \frac{1}{r}$$

9

$$\frac{r}{r} \alpha + \frac{r}{r} c + 1 = r$$

$$b\alpha + r$$

$$\rightarrow r\alpha - a\alpha + c + 1 = b\alpha + r$$

$$\rightarrow b = r \rightarrow a = r \rightarrow \alpha = -r$$

$$c + 1 = r \rightarrow c = -1$$

$$\alpha + b + c = -r + r - 1 = -1$$

10

11