

$$A|_{\xi}$$

$$\text{ان) } A|_{\xi} \quad B|_{-\eta} \rightarrow m = \frac{\omega - \xi}{\eta - \xi} = -\frac{1}{\xi} = -\frac{1}{\xi} \Rightarrow g = ax + b \xrightarrow{[\xi]} r = -\frac{1}{\xi}(\xi) + b \xRightarrow{b=\omega} g = -\frac{1}{\xi}x + \omega$$

$$\text{ب) } \eta g + \xi x = -1 \rightarrow a = -\frac{\xi}{\eta} = -\frac{1}{\eta} \xrightarrow{[\xi]} r = -\frac{1}{\eta}(\xi) + b \rightarrow \eta b = -1 \Rightarrow g = -\frac{1}{\eta}x + \frac{-1}{\eta}$$

$$\text{ج) } x + \eta g = 1 \rightarrow a = -\frac{1}{\eta} \rightarrow a' = \eta \xrightarrow{[\xi]} r = \eta(\xi) + b \rightarrow -1 = b \Rightarrow g = \eta x - 1$$

$$\text{د) } a = \tan\left(\frac{\pi}{4}\right) = \sqrt{\omega} \rightarrow r = \sqrt{\omega}(\xi) + b \rightarrow r - \xi\sqrt{\omega} = b \Rightarrow g = \sqrt{\omega}x + \eta - \xi\sqrt{\omega}$$

$$A|_{\eta}$$

$$\text{ان) } A|_{\eta} \quad B|_{-\xi} \quad AB = \sqrt{(\eta+1)^2 + (\omega-\eta)^2} = \sqrt{9+16} = \sqrt{25} = 5$$

$$\text{ب) } \eta x + \xi g - \omega = 0 \rightarrow d = \frac{|\eta(\eta) + \xi(\omega) - \omega|}{\sqrt{\eta^2 + \xi^2}} = \frac{1 \cdot 5}{5} = 1$$

$$2x + 3y = 6, \quad 4x + 4y = 1$$

$$\text{ان) } \begin{cases} 2x + 3y = 6 \\ 4x + 4y = 1 \end{cases} \Rightarrow \begin{cases} 2x + 3y = 12 \\ 4x + 4y = 1 \end{cases} \Rightarrow \frac{c+c'}{r} \Rightarrow \frac{12+1}{2} = 13$$

$$\text{ب) } \begin{cases} 2x + 3y = 10 \\ 4x + 4y = 1 \end{cases} \Rightarrow \frac{|c-c'|}{\sqrt{a^2+b^2}} \Rightarrow \frac{12-1}{\sqrt{16+9}} = \frac{11}{5}$$

$$2x + 3y = 3, \quad 3x - 2y = 1$$

$$d = \frac{|2x_0 + 3y_0 - 3|}{\sqrt{2^2 + 3^2}} = \frac{|3x_0 - 2y_0 - 1|}{\sqrt{3^2 + 2^2}} \rightarrow 2x_0 + 3y_0 - 3 = \pm(3x_0 - 2y_0 - 1)$$

$$\begin{cases} 2x_0 + 3y_0 - 3 = 3x_0 - 2y_0 - 1 \Rightarrow -x_0 + y_0 - 2 = 0 \Rightarrow -x_0 + y_0 = 2 \\ 2x_0 + 3y_0 - 3 = -3x_0 + 2y_0 + 1 \Rightarrow 5x_0 + y_0 = 4 \end{cases}$$

$$g - 2x = \omega \quad g + \eta x = \omega \quad \tan \theta = \left| \frac{m_2 - m_1}{1 + m_1 m_2} \right|$$

$$m_1 = \frac{\omega}{2} = \omega \quad m_2 = \frac{-\omega}{1} = -\omega$$

$$\tan \theta = 1 \rightarrow \theta = 45^\circ$$

$$\tan \theta = \left| \frac{-\omega - \omega}{1 - \omega} \right| = \left| \frac{-2\omega}{1 - \omega} \right| = 1$$

