

الف) $y = ax + b \rightarrow \begin{vmatrix} 1 \\ 1 \end{vmatrix} \begin{vmatrix} 5 \\ -1 \end{vmatrix} \sim a = -3 \sim y = -3x + 18$

ب) $y = ax + b \rightarrow ax - y + b = 0 \rightarrow \frac{a}{1} = \frac{-1}{1} \neq \frac{b}{1} \sim a = -3 \rightarrow y = -3x + b$ [f]

$2 = -3 + b \rightarrow y = -3x + 18$

ج) $\begin{cases} ax - y + b = 0 \\ x + 2y - 1 = 0 \end{cases} \rightarrow \frac{-a}{-1} = \frac{a}{1} \xrightarrow{\text{نسبت}} a = 3 \sim y = 3x + b$ [f] $y = 3x - 1$

د) $40 \sim \tan \theta = a = \sqrt{3} \rightarrow y = \sqrt{3}x + b$ [f] $\sqrt{3} + b = 2 \rightarrow y = \sqrt{3}x + 2 - \sqrt{3}$

الف) $\begin{vmatrix} -1 \\ 1 \end{vmatrix} \begin{vmatrix} 1 \\ 1 \end{vmatrix} \sim \sqrt{(1-2)^2 + (-1-2)^2} = \sqrt{10} = 5$

ب) $\begin{vmatrix} 1 \\ 1 \end{vmatrix} \begin{vmatrix} 1 \\ 1 \end{vmatrix} \sim \frac{|4+12-1|}{\sqrt{10}} = \frac{|15|}{\sqrt{10}} = 3$

الف) $\sim 2x + 9y - 18$

$2x + 3y - 4 = 0 \rightarrow 2x + 9y - 12 = 0 \rightarrow \frac{c+c'}{r} = -1 \rightarrow 2x + 9y - 12 = 0$

ب) $\frac{|c-c'|}{\sqrt{a^2+b^2}} = \frac{|-12+12|}{\sqrt{14+81}} = \frac{0}{\sqrt{95}} = 0$

$3x + 4y = 1$ و $2x + 3y = 3$

$\frac{|3x - 2y - 1|}{\sqrt{9+4}} = \frac{|2x + 3y - 3|}{\sqrt{4+9}} \rightarrow 3x - 2y - 1 = \pm(2x + 3y - 3)$

$\rightarrow 3x - 2y - 1 = 2x + 3y - 3 \rightarrow x = 5y - 2 \rightarrow y = \frac{x+2}{5}$

$\rightarrow 3x - 2y - 1 = -2x - 3y + 3 \rightarrow y = -5x + 4$

$y + 3x = 2 \rightarrow y = -3x + 2$

$y - 2x = 0 \rightarrow y = 2x$

$\left| \frac{m-m'}{1+mm'} \right| \rightarrow \left| \frac{-3-2}{1-6} \right| = 1 \sim \tan \theta = 1$

$$-4) \sqrt{\underbrace{(1+r)^r}_{r_4} \underbrace{(-0.01)^r}_{r_5}} = 1.$$

$$\therefore y = \frac{r-r}{r} = 1, \quad x = \frac{-a+r}{r} = -1 \Rightarrow (-1, 1)$$

انف / 1.1 / B / 2.2 / C / 3.3

$$\leadsto \frac{-1 \cdot -y + c}{1} = x = -y, \quad y = \frac{-1c + c + 1}{1} = -c \leadsto (-c, -c)$$

$$c) \frac{1}{r} \begin{vmatrix} -1 & -r & r \\ -1 & r & 1 \\ 1 & 1 & 1 \end{vmatrix} = (-9 + r + 9 - r - r + r) \frac{1}{r} = \frac{-r}{r} = -1$$

جواب) $-y = \frac{r_{n+1}}{r_n - r} \rightarrow y = \frac{-r_{n+1}}{r_n - r}$

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

$$2) x = \frac{ry+1}{fy-r} \leadsto ry+1 = rxy - r^2 \rightarrow y(r-rx) = -r^2-1 \rightarrow y = \frac{-r^2-1}{r-rx}$$

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

$$x' \sim \eta + \nu$$

$$y' \rightarrow y-r \Rightarrow y-r = \frac{r(2+r)+1}{2-1} = \frac{r^2+r+1}{2-1} \rightarrow y = \frac{r^2+r+1}{2-1} - \frac{\Delta t}{2-1}$$

$$\begin{aligned} \lambda' &= \lambda + r \\ y' &= y + r \end{aligned} \leadsto y + r = \frac{r(\lambda + r) + 1}{r} = \frac{r\lambda + r + 1}{r} \rightarrow y = \frac{r\lambda + r + 1 - r}{r} = \frac{r\lambda + 1}{r}$$

$$\text{b) } \begin{cases} 3x + 4y = 2 \\ x - 2y = 1 \end{cases} \rightarrow \begin{array}{r} 3x + 4y = 2 \\ -3x + 10y = -3 \\ \hline 14y = -1 \end{array} \sim y = -\frac{1}{14} \xrightarrow[y = -\frac{1}{14}]{3x + 4y = 2} x = \frac{15}{14}$$

$$\rightarrow \lambda = \frac{\begin{vmatrix} 1 & 1 \\ -\omega & 1 \end{vmatrix}}{\begin{vmatrix} 1 & \varepsilon \\ 1 & -\omega \end{vmatrix}} = \frac{\omega + 1}{-\omega - 1} = \frac{1\omega}{1\omega}$$

$$y = \frac{\begin{vmatrix} 3 & 2 \\ 4 & 1 \end{vmatrix}}{\begin{vmatrix} 4 & 1 \\ 1 & -9 \end{vmatrix}} = \frac{3-8}{-36-1} = \frac{-5}{-37} = \frac{5}{37}$$