

$$\begin{aligned} \frac{-\varepsilon(\varepsilon)+h}{-1\varepsilon} &= r \quad m=-\varepsilon \quad \Rightarrow m=\frac{r-(\varepsilon r)}{\varepsilon-\varepsilon} = \frac{\varepsilon}{\varepsilon-\varepsilon} \quad B \mid \frac{\varepsilon}{r} \quad A \mid \frac{\varepsilon}{r} \quad \text{الف (ب)} \\ \Rightarrow h &= 1\lambda \end{aligned}$$

$$y = -\varepsilon n + 1\lambda$$

$$\begin{aligned} m &= \frac{-\varepsilon}{r} = -\varepsilon \quad A \mid \frac{\varepsilon}{r} \\ \Rightarrow y + \varepsilon n &= -1\lambda \quad \text{ب. (الف) A} \\ m_1 &= m_r \end{aligned}$$

$$\frac{-r(\varepsilon)+h}{-1r} = r \quad \Rightarrow h = 1\varepsilon$$

$$y = r n - 1\varepsilon$$

$$\frac{r(\varepsilon)+h}{1r} = r \quad \Rightarrow h = -1\varepsilon$$

$$\begin{aligned} m' &= r \quad \Rightarrow m = \frac{-1}{r} \quad \Rightarrow n + r y = 1 \quad \text{ب. (الف) A} \\ A \mid \frac{\varepsilon}{r} \end{aligned}$$

$$\begin{aligned} \sqrt{r}(\varepsilon) + h &= r \\ h &= r - \varepsilon\sqrt{r} \end{aligned}$$

$$m = \sqrt{r} \quad \Rightarrow \tan \frac{\pi}{r} = m \quad \text{(ب)}$$

$$y = \sqrt{r} n + r - \varepsilon\sqrt{r}$$

$$d = \sqrt{(r-(\varepsilon))r + (r-\varepsilon)r} = \sqrt{r\varepsilon + \varepsilon r} = d = \sqrt{\varepsilon r + \varepsilon r} \quad \text{الف (ب)}$$

$$d = \frac{|r(r) + \varepsilon(r) - r|}{\sqrt{r\varepsilon}} = \frac{1\varepsilon}{\varepsilon} = r \quad r n + \varepsilon y = r \quad \text{(ب)}$$

$$\text{فاصله دو خط} = \frac{|4-\varepsilon|}{\sqrt{1r}} = \frac{r}{\sqrt{1r}}$$

$$\begin{aligned} r n + r y &= \varepsilon \\ \varepsilon n + \varepsilon y &= 1 \quad r n + r y = \varepsilon \\ \text{الف (ب)} \quad m' &= \frac{-r}{r} \end{aligned}$$

$$\frac{1}{\sqrt{1r}} \Rightarrow \frac{4+\varepsilon}{r} = \varepsilon \quad \Rightarrow y = \frac{-r}{r} n + \frac{\varepsilon}{r} \quad \Rightarrow r y + r n = \varepsilon$$

$$\text{فاصله دو خط} = \frac{|C-C'|}{\sqrt{a^2+b^2}}$$

$$\Rightarrow \frac{|4-\varepsilon|}{\sqrt{\varepsilon+1}} = \frac{r}{\sqrt{1r}}$$

$$\begin{aligned} r n + r y &= 4 \\ \varepsilon n + \varepsilon y &= 1 \quad \Rightarrow r n + r y = \varepsilon \end{aligned}$$

$$r n + r y = r$$

$$r n - r y = 1$$

$$\Rightarrow \frac{|r n + r y - r|}{\sqrt{1r}} = \frac{|r n - r y - 1|}{\sqrt{1r}}$$

$$\Rightarrow |r n + r y - r| = |r n - r y - 1|$$

$$r n + r y - r = r n - r y - 1 \Rightarrow \varepsilon y - n = r$$

$$r n + r y - r = -r n + r y + 1$$

$$\varepsilon n + y = \varepsilon$$

$$\tan \alpha = \left| \frac{m-m'}{1+mm'} \right|$$

-5

$$y + 13n = 13$$

$$y - 12n = 5$$

$$\Rightarrow \frac{-13 - (-12)}{1 - 156} = \frac{-1}{-155} = \frac{1}{155} \Rightarrow \tan \alpha = 1 \Rightarrow \alpha = \frac{\pi}{4}$$

$$B \mid \frac{1}{2}, A \mid \frac{1}{2} \quad -4$$

$$\Rightarrow \frac{13-5}{2} = \frac{-2}{2} = -1 = n \quad (-)$$

$$\frac{5-13}{2} = 1 = y \Rightarrow (-1, 1)$$

$$d = \sqrt{\frac{(13-(-5))^2}{1^2} + \frac{(-2-(-1))^2}{-4^2}} = \sqrt{100} = 10 \quad (\text{الف})$$

$$\mid \frac{-10}{-13} \mid \mid \frac{-2}{13} \mid > \mid \frac{13}{1} \mid \quad -\checkmark$$

$$\text{الف) } (-13, -13) \Rightarrow \frac{-13+13+1}{13} = \frac{-9}{13} = \frac{-9}{13} \Rightarrow \frac{13-10-2}{13} = \frac{-9}{13} = \frac{-9}{13} \quad (\text{الف})$$

$$S = \frac{1}{2} \begin{vmatrix} -10 & -2 & 13 \\ 1 & 1 & 1 \\ -13 & 13 & 1 \end{vmatrix} = \frac{1}{2} (-39 - 2 - 10 + 10 - 26 - 9) = \frac{1}{2} \times 94 = 47 \quad (\text{ب})$$

$$\text{الف) } -y = \frac{13n+1}{12n-13} \Rightarrow y = \frac{13n+1}{13-12n} \quad \text{قرينة بين متغيرين} \quad -1$$

$$\text{ب) } y = \frac{-13n+1}{-12n-13}$$

$$\text{ج) } \begin{cases} \text{حاصل ضرب المتغيرين} \\ \text{حاصل ضرب المتغيرين} \end{cases} \Rightarrow n = \frac{13y+1}{12y-13} \Rightarrow 12yn - 13n = 13y+1 \Rightarrow 12yn - 13y = 13n+1$$

$$\Rightarrow y = \frac{13n+1}{12n-13}$$

$$\text{د) } \begin{cases} \text{حاصل ضرب المتغيرين} \\ \text{حاصل ضرب المتغيرين} \end{cases} \Rightarrow -n = \frac{-13y+1}{-12y-13} \Rightarrow 12ny + 13n = -13y+1$$

$$\Rightarrow 12ny + 13y = 1 - 13n \Rightarrow y(12n+13) = 1 - 13n \Rightarrow y = \frac{1-13n}{12n+13}$$

$$n' = n - 12$$

$$y' = y - (-13)$$

$$(13, -13) \text{ صيغتين}$$

$$y = \frac{13n+1}{n-13} \quad (9)$$

$$y + 13 = \frac{13(n-12)+1}{(n-12)-13} \Rightarrow y = \frac{13n-156}{n-25} - 13 \Rightarrow \frac{13n-156-13n+325}{n-25} = \frac{169}{n-25}$$

$$\Rightarrow y = \frac{169}{n-25}$$

$$n' = n - 12$$

$$y' = y - 12$$

$$(13, 12) \text{ صيغتين}$$

$$\Rightarrow y - 12 = \frac{13(n-12)+1}{n-12-13} = \frac{13n-156}{n-25} \Rightarrow y = \frac{13n-156}{n-25} - 12 = \frac{13n-156-12n+300}{n-25} = \frac{14n+144}{n-25}$$

$$\begin{cases} 3x + 2y = 2 \\ x - 2y = 1 \end{cases} \quad (10)$$

$$x-3 \begin{cases} 3x + 2y = 2 \\ x - 2y = 1 \end{cases} \Rightarrow \begin{cases} 3x + 2y = 2 \\ -3x + 12y = -3 \end{cases} \xrightarrow{\text{جمع}} 14y = -1 \Rightarrow y = \frac{-1}{14} \quad (\text{الف})$$

$$x + \frac{12}{14} = \frac{19}{14} \Rightarrow x = \frac{12}{14}$$

$$x = - \frac{\begin{vmatrix} 2 & 1 \\ -2 & 1 \end{vmatrix}}{\begin{vmatrix} 3 & 2 \\ 1 & -2 \end{vmatrix}} = - \frac{(2 - (-2))}{-12 - 2} = \frac{-4}{-14} = \frac{2}{7}$$

$$y = \frac{\begin{vmatrix} 3 & 2 \\ 1 & 1 \end{vmatrix}}{\begin{vmatrix} 3 & 2 \\ 1 & -2 \end{vmatrix}} = \frac{3 - 2}{-12 - 2} = \frac{1}{-14} = -\frac{1}{14}$$

$$x = - \frac{\begin{vmatrix} b & c \\ b' & c' \end{vmatrix}}{\begin{vmatrix} a & b \\ a' & b' \end{vmatrix}} \quad y = \frac{\begin{vmatrix} a & c \\ a' & c' \end{vmatrix}}{\begin{vmatrix} a & b \\ a' & b' \end{vmatrix}}$$