

الف) $\begin{vmatrix} 1 & 5 \\ 2 & -1 \end{vmatrix} a = \frac{1-(-2)}{2-0} = \frac{3}{2} = 1.5$

$y = -x + b \Rightarrow 1 = -1 + b \Rightarrow b = 2 \Rightarrow \boxed{y = -x + 2}$

ب) $2y + 4x = 1$

$2y + 4x = b$

$1 + 2 = b \Rightarrow b = 3$

$\boxed{y = -2x + 1.5}$

ج) $3y = -x + 1$

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

$m' = 3$

$y = 3x + b$

$1 = 1 + b$
 $b = -1$

$\Rightarrow \boxed{y = 3x - 1}$

د) $a = \tan \alpha = \tan \frac{\pi}{4} = 1$

$y = x + b$

$1 = 1 + b$

$b = 0$

$\boxed{y = x + 0}$

الف) $\sqrt{(1-(-1))^2 + (1-1)^2} = \sqrt{4+0} = 2$

ب) $\frac{|4+12-2|}{\sqrt{4+14}} = \frac{14}{\sqrt{18}} = \frac{7\sqrt{2}}{3}$

$x + 4y = 1$

$2x + 4y = 2 \Rightarrow x + 2y = 1$

$x + 4y = 1$

$\boxed{y = -\frac{1}{4}x + \frac{1}{4}}$

الف) $x + 4y$

$= \frac{1}{\sqrt{17}}$

ب) $\frac{|x|}{\sqrt{14+14}}$

$= \frac{1}{\sqrt{28}}$

$= \frac{1}{\sqrt{28}} = \frac{\sqrt{28}}{28}$

$\boxed{\frac{\sqrt{28}}{28}}$

$2x + 3y = 2$

$3x - 2y = 1$

$|2x + 3y - 2|$

$|3x - 2y - 1|$

$\sqrt{13}$

$\sqrt{13}$

$2x + 3y = 2$

$dy = x + 2$

$2x + 3y = 2$

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

$$y + \sqrt{u} \leq \sqrt{u} \rightarrow m \leq -1$$

$$y - \sqrt{u} = \Delta \quad m' \leq \sqrt{u} \quad \tan \alpha = \left| \frac{m - m'}{1 + mm'} \right| \Rightarrow \tan \alpha = \frac{|-\Delta|}{|1 + (-1)|} = \frac{\Delta}{+0} \Rightarrow +1$$

$$\tan \epsilon \delta \leq 1 \Rightarrow \alpha \leq \epsilon \delta \Rightarrow \beta, \alpha, -\epsilon \delta \leq 180^\circ$$

$$\text{الف) } \sqrt{(3 - (-5))^2 + (-2 - \epsilon)^2} \leq \sqrt{4\epsilon + 16} \leq \sqrt{16} \quad (10) \quad -9$$

$$\text{ب) } \begin{vmatrix} \frac{3-\Delta}{2} & -1 \\ -\frac{2+\epsilon}{2} & 1 \end{vmatrix} \rightarrow \begin{vmatrix} -1 \\ 1 \end{vmatrix}$$

$$\text{الف) } \begin{vmatrix} \frac{3-2-1}{2} & -\frac{9}{2} \\ \frac{1+2-1}{2} & -\frac{9}{2} \end{vmatrix} \rightarrow \begin{vmatrix} -1 & -9 \\ -1 & -9 \end{vmatrix} \quad -V$$

$$\text{ب) } \frac{1}{2} \begin{vmatrix} -1 & -2 & 3 \\ -1 & 2 & 1 \\ 1 & 1 & 1 \end{vmatrix} = \frac{1}{2} \times 94 = \boxed{47}$$

$$\hookrightarrow \left(\underbrace{-3 - 2 - 3}_{-8} \right) - \left(\underbrace{9 - 1 + 2}_{10} \right) = -18 \quad \text{مجموع قيم}$$

$$\text{الف) } y = \frac{2u+1}{\epsilon u-3} \xrightarrow{\text{نسبة}} -y = \frac{2u+1}{\epsilon u-3} \quad -A$$

$$\text{ب) } y = \frac{2u+1}{\epsilon u-3} \xrightarrow{\text{نسبة}} y = \frac{2u+1}{-\epsilon u-3}$$

$$\text{ج) } u = \frac{2y+1}{\epsilon y-3}$$

$$= \epsilon u y - 3u \leq 2y+1 \quad y(\epsilon u-3) \leq 2u+1 \Rightarrow y = \frac{2u+1}{\epsilon u-3}$$

$$\Rightarrow -u \leq \frac{-2y+1}{-\epsilon y-3} \Rightarrow \epsilon y u + 3u \leq -2y+1 \Rightarrow y(\epsilon u+3) \leq -2u+1 \Rightarrow y = \frac{-2u+1}{\epsilon u+3}$$

$$\text{الف) } u' = u-2 \Rightarrow u = u' + 2$$

$$y' = y+3 \Rightarrow y = y' - 3$$

$$y = \frac{2u+1}{u-2} \Rightarrow y' - 3 = \frac{2u'+1}{u'-1}$$

$$y' = \frac{2u'+1}{u'-1} + 3 \Rightarrow y' = \frac{2u'+1 + 3u' - 3}{u'-1} = \frac{5u'-2}{u'-1}$$

ب) $u' = u - 2 \Rightarrow u = u' + 2$
 $y' = y - 2 \Rightarrow y = y' + 2$

$y' + 2 = \frac{2u' + 4 + 1}{u' + 2} \Rightarrow y' = \frac{2u' + 4}{u'} - 2$
 $\Rightarrow y' = \frac{2u' + 4 - 2u'}{u'} = \frac{4}{u'} \Rightarrow y' = \frac{4}{u'}$

الف) $\begin{cases} 3u + 4y = 2 \\ u - 5y = 1 \end{cases}$

-10

$u - 5y = 1 \Rightarrow 3u - 15y = 3 \Rightarrow 3u = 3 + 15y \Rightarrow u = 1 + 5y$
 $14y = -1 \Rightarrow y = -\frac{1}{14}$

$u = \frac{2 + 10}{14} \Rightarrow u = \frac{12}{14}$

ب) $u = \frac{2 + 10}{-14 - 2} = \frac{12}{-14}$

$y = \frac{3 - 2}{-14} = -\frac{1}{14}$