

19, 10

B

الف) $(\omega, -1) \quad m = \frac{\Delta y}{\Delta x} = \frac{-1-1}{\omega-1} = -2 \quad y-1 = -2(x-1) \Rightarrow y = -2x + 3$ (1)

ب) $xy + x = -1 \quad m = -1 \Rightarrow y = -x - 1 \Rightarrow y-1 = -1(x-1) \Rightarrow y = -x + 2$

ج) $x + y = 1 \Rightarrow y = -x + 1 \Rightarrow y-1 = -1(x-1) \Rightarrow y = -x + 2$ (5)

د) $m = \tan \frac{\pi}{4} = \frac{\sqrt{2}}{1} = \sqrt{2} \Rightarrow y-1 = \sqrt{2}(x-1) \Rightarrow y = \sqrt{2}x - \sqrt{2} + 1$

الف) $(1, 2)$

الف) $AB = \sqrt{(\Delta x)^2 + (\Delta y)^2} = \sqrt{(-1-1)^2 + (1-2)^2} = \sqrt{2}$

ب) $3x + 4y = 3 \Rightarrow \frac{3}{a}x + \frac{4}{b}y = \frac{3}{c} \Rightarrow d = \frac{|ax + by + c|}{\sqrt{a^2 + b^2}} = \frac{|3(1) + 4(2) - 3|}{\sqrt{9 + 16}} = \frac{10}{5} = 2$ (5)

ج) $\begin{cases} 2x + 3y = 4 \\ 4x + 5y = 1 \end{cases} \Rightarrow \frac{2}{a}x + \frac{3}{b}y = \frac{4}{c} \Rightarrow d = \frac{|c - c'|}{\sqrt{a'^2 + b'^2}} = \frac{|4 - 1|}{\sqrt{4 + 9}} = \frac{3}{5}$ (3)

د) $\begin{cases} 2x + 3y = 3 \\ 3x - 2y = 1 \end{cases} \Rightarrow \frac{2}{a}x + \frac{3}{b}y = \frac{3}{c} \Rightarrow d = \frac{|c - c'|}{\sqrt{a'^2 + b'^2}} = \frac{|3 - 1|}{\sqrt{4 + 9}} = \frac{2}{5}$ (4)

هـ) $\frac{|2x + 3y - 3|}{\sqrt{4 + 9}} = \frac{|3x - 2y - 1|}{\sqrt{9 + 4}} \Rightarrow |2x + 3y - 3| = |3x - 2y - 1|$ (5)

$2x + 3y - 3 = 3x - 2y - 1 \Rightarrow \omega y - x = 2 \Rightarrow y = \frac{x + 2}{\omega}$ [I]

$2x + 3y - 3 = -3x + 2y + 1 \Rightarrow 5x + y - 4 = 0 \Rightarrow y = -5x + 4$ [II]

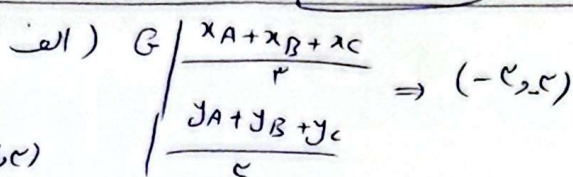
$y + 3x = 3 \Rightarrow y = -3x + 3 \Rightarrow m' = -3$

$y - 2x = 2 \Rightarrow y = 2x + 2 \Rightarrow m = 2$

$\tan \theta = \left| \frac{m - m'}{m' + 1} \right| = \left| \frac{2 - (-3)}{-3 + 1} \right| = \left| \frac{5}{-2} \right| = \frac{5}{2} \Rightarrow \tan \theta = \frac{5}{2}$ (5)

فد

$A(-r)$ $M(-1,1)$ $B(-8,1)$



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c) $\frac{r_{n+1}}{r_n} = 0 \rightarrow r_{n+1} = 0 \rightarrow r_n = -1 \rightarrow x = -\frac{1}{r}$

$$\sum_{x=y} J = \frac{ry+1}{rx-r} \rightarrow \frac{x=ry+1}{ry-r} \rightarrow ry+1 = \epsilon ry \quad \text{⑤}$$

$$x_1 + c_n = c_{ny} - c_y$$

الف) $a=2, b=-2$

$$\Rightarrow Y - r = \frac{\omega + rx}{x-1} \Rightarrow Y = \frac{\omega + rx}{x-1}$$

$$x = X + r, y = Y + r \quad \cdot Y + r = \frac{r(c+x)+1}{(X+r)-r} \Rightarrow Y = \frac{rX+v}{X} - r \Rightarrow Y = \frac{v}{X}$$

1, VO

$$\begin{pmatrix} \cdot & \cdot \\ \cdot & \cdot \end{pmatrix} \begin{pmatrix} a & b \\ c & d \end{pmatrix} = \begin{pmatrix} e & f \\ g & h \end{pmatrix}$$

$$x - 2\left(-\frac{1}{19}\right) = 1 \Rightarrow x = \frac{17}{19}$$

$$\left\{ \begin{array}{l} \underline{a'}x + \underline{b'}y = \underline{c'} \\ \underline{-d} \end{array} \right. \quad \text{5}$$

$$x = - \frac{\begin{vmatrix} f & r \\ -d & 1 \end{vmatrix}}{\begin{vmatrix} r & f \\ 1 & -d \end{vmatrix}} = \frac{f - (-1 \cdot)}{-d - r} = \frac{15}{19}$$

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