

(الف) $\frac{1}{\dots}$

$A \begin{vmatrix} 2 \\ 1 \end{vmatrix} B \begin{vmatrix} 0 \\ -1 \end{vmatrix} \rightarrow m = \frac{2+2}{2-0} = -2$

بالمثل

$y = -2x + H$

$2 = -12 + H \rightarrow H = 14$

$\rightarrow y = -2x + 14$

(ب) $\frac{1}{\dots}$

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

$A \begin{vmatrix} 2 \\ 1 \end{vmatrix}$

$\rightarrow y = -\frac{1}{2}x + H$
 $2 = -4 + H \rightarrow H = 6$

$y = -\frac{1}{2}x + 6$

(ج) $\frac{1}{2}$

$y = -\frac{1}{2}x + \frac{1}{2} \rightarrow m' = \frac{1}{2}$

$A = \begin{vmatrix} 2 \\ 1 \end{vmatrix}$

$y = \frac{1}{2}x + H$

$2 = 1 + H \rightarrow H = 1$

$y = \frac{1}{2}x + 1$

(د) $\frac{2}{\dots}$

$A \begin{vmatrix} 2 \\ 1 \end{vmatrix} B \begin{vmatrix} -1 \\ 1 \end{vmatrix} \rightarrow L = \sqrt{(1+1)^2 + (1-1)^2} = 0$

$L = 0$

(هـ) $\frac{2}{\dots}$

$A \begin{vmatrix} 2 \\ 1 \end{vmatrix}$

$2x + 2y - 2 = 0 \rightarrow L = \frac{2x^2 + 2x - 2}{\sqrt{2^2 + 2^2}} = \frac{10}{8} = \frac{5}{4}$

$L = \frac{5}{4}$

$A: 2x + 2y - 2 = 0 \Rightarrow$
 $B: 2x + 2y - 2 = 0$
 $\frac{-2-2}{2} = -2$

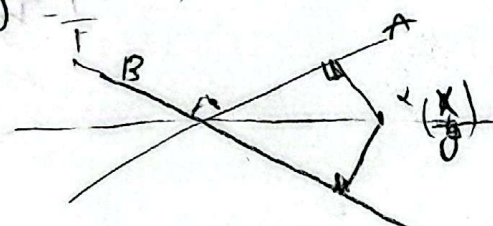
(و) $\frac{2}{\dots}$

$2x + 2y - 2 = 0$

(ز) $\frac{1}{2}$

$\frac{|k - k'|}{\sqrt{a^2 + b^2}} = \frac{|2 + 2|}{\sqrt{2^2 + 2^2}} = \frac{2}{2} \rightarrow L = \frac{2}{2}$

$A: 2x - 2y - 1 = 0$
 $B: 2x + 2y - 2 = 0$



① $x - y + 1 = 0$

② $x + y - 1 = 0$

$a - b = -1$
 $a - b = -1$
 $a - b = -1$

(3) $y = rx - c \rightarrow \theta = B - \alpha$
 $y = -\frac{c}{B}x + c$
 $\tan \theta = \frac{\tan(B - \alpha)}{1 + \tan \alpha \tan B} = \frac{\tan B - \tan \alpha}{1 + \tan \alpha \tan B}$
 $\tan \theta = \frac{-\frac{c}{B} - r}{1 - r} = \frac{-c}{-c} = 1$

درج $\theta = 45^\circ$

(4) $A \begin{vmatrix} r \\ -c \end{vmatrix} B \begin{vmatrix} -c \\ c \end{vmatrix} L = \sqrt{(c+0)^2 + (c+r)^2} = 10$

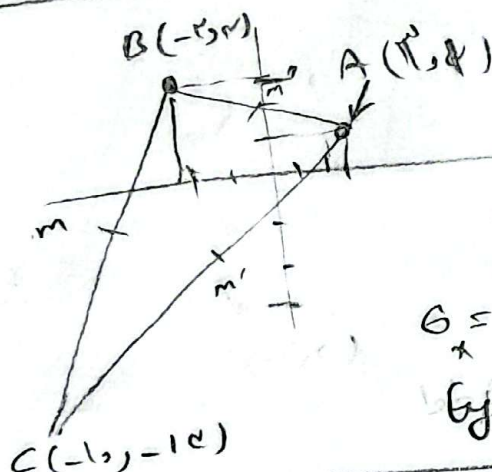
(الف) $L = 10$

$m_x = \frac{c-0}{r} = -\frac{r}{r} = -1$

$m_y = \frac{c-r}{r} = \frac{r}{r} = 1$

$m(-1, 1)$
ب

(✓)



الف - محل برخورد میانه ها

$m_x = \frac{-10 + c - r}{c} = \frac{-9}{c} = -c$

$m_y = \frac{-10 + c + 1}{r} = \frac{-9}{r} = -c$

(الف) $G(-c, -c)$

خط $AB \rightarrow \frac{-r-c}{c-1} = -\frac{c}{r} \rightarrow y = -\frac{c}{r}x + h$
 $x = -c, y = -c \rightarrow h = -r$

$AB: y = -\frac{c}{r}x - r$

$CH = \frac{|-\frac{c}{r}(-1) - r|}{\sqrt{1 + \frac{c^2}{r^2}}}$

$AB = \sqrt{(-r-c)^2 + (r)^2} = \sqrt{r^2 + c^2}$

$= \frac{r^2}{\sqrt{r^2 + c^2}} = \frac{r^2}{\sqrt{r^2 + c^2}}$

$S = r^2$

$S = \frac{r^2}{\sqrt{r^2 + c^2}} \times \sqrt{r^2 + c^2} \times \frac{1}{r} = r^2$

$$x \left[\frac{b_1}{31} = x \right] \leftarrow 1 = \frac{b_1}{9} + x$$

$$\left[\frac{b_1}{1} = y \right] \leftarrow 1 = y$$

$$\left[\begin{array}{l} x = R_{11} + R_{21} - \\ y = R_{11} + R_{21} \end{array} \right] \left[\begin{array}{l} 1 = R_{11} - x \\ y = R_{11} + x \end{array} \right] \leftarrow$$

$$\boxed{\frac{b_1}{1} = y}$$

$$\frac{b_1}{1} = \frac{2-10-2}{2-2} = \frac{12}{0} = y$$

~{

$$\boxed{\frac{b_1}{31} = x}$$

$$\left| \begin{array}{cc} 1 & 1 \\ 2 & 1 \end{array} \right|$$

$$\frac{b_1}{31} = \frac{2+2}{2-2} = \frac{4}{0} = x$$

$$\left| \begin{array}{cc} 1 & 1 \\ 2 & 3 \end{array} \right| = x$$

$$\left. \begin{array}{l} 1 = R_{11} - x \\ y = R_{11} + x \end{array} \right\}$$

①

$$(A) \quad y = \frac{2x+1}{2x-2}$$

$$\frac{\text{الف}}{2x-2} \quad -y = \frac{2x+1}{2x-2} \rightarrow y = \frac{-2x-1}{2x-2}$$

$$\frac{\text{ب}}{2x-2}$$

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

$$\frac{2}{1-2x-2}$$

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

$$y(2x-2) = 2y+1$$

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

$$\frac{2}{2-2x-2}$$

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

$$y(2x+2) = 1-2x$$

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

$$(9) \quad x' = x - 2 \rightarrow x' = x - 2 \rightarrow x = x' + 2$$

$$y' = y - 2$$

$$y' = y + 2$$

$$y' = y - 2$$

$$\frac{2}{2-2} \quad (الف)$$

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

الف.

$$y' = \frac{2x'+3}{x'+1} + 2 = \frac{2x'+3+2x'+2}{x'+1}$$

$$y' = \frac{4x'+5}{x'+1}$$

$$\frac{2}{2-2}$$

$$2-2$$

$$x' = x - 2$$

$$y' = y - 2$$

$$x = x' + 2$$

$$y = y' + 2$$

$$y' + 2 = \frac{2x'+2+1}{x'}$$

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