

$$\begin{cases} y - ax = 1 \rightarrow m = a \\ ay - x = a - 1 \rightarrow m = \frac{1}{a} \end{cases} \rightarrow a = \frac{1}{a} \quad (1)$$

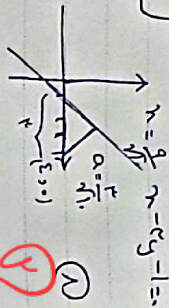
$$if a = 1 \rightarrow \begin{cases} y - x = 1 \\ y - x = 0 \end{cases} \rightarrow a = \pm 1$$

$$if a = -1 \rightarrow \begin{cases} x + y = 1 \\ y - x = -1 \end{cases} \rightarrow \begin{cases} x - y + 1 = 0 \\ x - y = 0 \end{cases}$$

$$d = \frac{1}{\sqrt{1+1}} = \frac{1}{\sqrt{2}} \quad \begin{matrix} x' + y' = d \\ x' + y' = \frac{1}{\sqrt{2}} \end{matrix} \quad \begin{matrix} n = \frac{\sqrt{2}}{2} \\ n' = \frac{\sqrt{2}}{2} \end{matrix}$$

$$S = \frac{1}{\sqrt{2}} \times \frac{1}{\sqrt{2}} = \frac{1}{2}$$

$$d = \frac{1}{\sqrt{1+1}} = \frac{1}{\sqrt{2}}$$

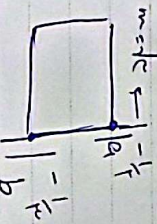


$$x = \sqrt{1 - \frac{1}{2}} = \sqrt{\frac{1}{2}} = \frac{1}{\sqrt{2}} \quad S = \frac{1}{2} \times \frac{1}{\sqrt{2}} \times \frac{1}{\sqrt{2}} = \frac{1}{4}$$

$$m = \frac{b-a}{-1/2 + 1/2} = \sqrt{2} \rightarrow b-a = \frac{\sqrt{2}}{2} \quad (2)$$

$$AB = \sqrt{\left(-\frac{1}{2} + \frac{1}{2}\right)^2 + (b-a)^2} = \sqrt{\left(\frac{1}{2}\sqrt{2}\right)^2} = \frac{1}{2}$$

$$if a = 0 \rightarrow ax + y = 1 \rightarrow \frac{1}{2}x + y = 1 \rightarrow y = 1 - \frac{1}{2}x$$

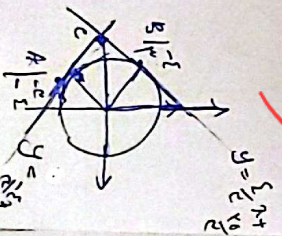


$$\frac{1}{2}x + \frac{1}{2}y = -\frac{1}{2}x - \frac{1}{2}y$$

$$x + y = -1 \rightarrow 1 + 1 = -1 \rightarrow -1 = -1$$

$$y = -1 \quad C = (-1, -1)$$

$$-1 - 1 = -2$$



$$m_{BC} = \frac{11 - 1}{1 - 1} = 1$$

$$m_{AH} = -1$$

$$y = \frac{1}{2}(x) + b$$

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

$$y = -\frac{1}{2}(1) + b$$

$$b = 1 + \frac{1}{2} = \frac{3}{2}$$

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

$$\begin{cases} y - 1x + 1 = 0 \\ x(y + 1 - 1 = 0) \end{cases}$$

$$\begin{cases} y - 1x + 1 = 0 \\ 1y + 1 - 1 = 0 \end{cases}$$

$$y - 1x + 1 = 0$$

$$\frac{1}{2}x = 1 \rightarrow x = 2$$

$$AH = \sqrt{1 + 1} = \sqrt{2} = \frac{1}{\sqrt{2}}$$

$$\begin{cases} AB = y + 1x = 1 \\ BC = 1y - 1x = -1 \end{cases} \rightarrow \begin{cases} x = 1 \\ y = 1 \end{cases} \quad (3)$$

$$\begin{cases} -1x - 1y = -1 \\ 1x - 1y = -1 \end{cases} \rightarrow \begin{cases} y = 1 \\ x = 1 \end{cases}$$

$$m = \frac{1}{2} \quad \frac{1}{2}x = 1 \rightarrow x = 2$$

$$m = \frac{1}{2} = \frac{1}{2} \rightarrow \frac{1}{2}x = 1 \rightarrow x = 2$$

$$\begin{cases} y = -1x - 1 \\ y = 1 \end{cases} \rightarrow \begin{cases} y + 1x + 1 = 0 \\ 1y - 1x = 0 \end{cases}$$

$$if a = 0 \rightarrow ax + y = 1 \rightarrow \frac{1}{2}x + y = 1 \rightarrow y = 1 - \frac{1}{2}x$$

Subject
Year



Month

Date

19/5

$$A(-1, k)$$

$$B(\epsilon, m)$$

$$k = -\frac{1}{r}x - r + b$$

$$m = -\frac{1}{r}x\epsilon + b$$

$$S = (\sqrt{\epsilon\delta})(\sqrt{\epsilon\delta}) = \epsilon\delta$$

$$\begin{cases} x - m + r - b = 0 \\ k - 1 - b = 0 \\ -m - r + b = 0 \end{cases}$$

$$\underbrace{k - m = r}_{\Delta y}$$

$$AB = \sqrt{(\Delta y)^2 + (\Delta x)^2} = \sqrt{9 + 16} = \sqrt{25}$$

$$\Delta x = -1 - \epsilon = -4$$

$$AB \parallel CD \rightarrow \frac{r-1}{-1-\epsilon} = \frac{-\epsilon}{r\epsilon+1} \rightarrow r\epsilon+1 = \epsilon$$

$$m = \frac{\epsilon}{r}$$

$$AB \perp BC \rightarrow \frac{-\epsilon}{\epsilon} \times \frac{y-1}{-\frac{\epsilon}{r}} = -1 \rightarrow \frac{y-1}{r} = -1$$

$$y = -1$$

$$C = (\frac{\epsilon}{r}, -1)$$

$$AB = \sqrt{16 + 9} = 5$$

$$BC = \sqrt{r^2 + \frac{1}{r^2}} = \frac{\delta}{r}$$

$$r\epsilon\delta + (m^2 - 1)y - r = 0$$

$$m = \frac{-a}{b} = \frac{-rm}{m^2 - 1} = \sqrt{c}$$

$$\sqrt{r}m^2 - \sqrt{r} = -rm$$

$$\frac{\sqrt{r}}{r} - \frac{\sqrt{c}}{c} = \frac{\sqrt{c}}{c}$$

$$\sqrt{r}m^2 + rm - \sqrt{c} = 0$$

$$m^2 + rm - r = 0$$

$$(m-1)(m-r) = 0$$

$$\left| \frac{-r}{\sqrt{r}} - \frac{1}{\sqrt{r}} \right| = \frac{r}{\sqrt{r}}$$

$$m = \frac{1}{\sqrt{c}}, \frac{r}{\sqrt{c}}, \frac{\sqrt{r}}{r}, \frac{\sqrt{c}}{r}$$