

$$A \begin{vmatrix} 1 \\ -1 \end{vmatrix} \quad B \begin{vmatrix} 1 \\ 1 \end{vmatrix}$$

$$\alpha = \frac{1+1}{1-1} = \frac{1}{-1} = -1 \quad \xrightarrow{\text{مقلوب}} \alpha' = \frac{1}{-1}$$

$$M = \left| \frac{\frac{1+1}{1-1}}{1+(-1)} \right| \Rightarrow \left| \frac{1}{0} \right|$$

$$y-1 = \frac{1}{1} (x-1)$$

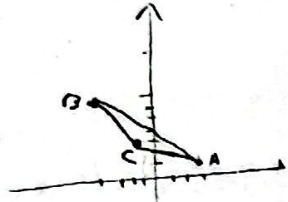
$$y = \frac{1}{1} x - \frac{1}{1} + \frac{1}{1} \Rightarrow y = x - 1$$

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

$$B \begin{vmatrix} -1 \\ 1 \end{vmatrix}$$

$$C \begin{vmatrix} -1 \\ 1 \end{vmatrix}$$



$$BC = \sqrt{(-1+1)^2 + (1-(-1))^2} = 2$$

$$BC - AH = 2 - 1 = 1$$

$$BC = y - 1 = -1(x+1) \rightarrow y = -x - 1 - 1 \rightarrow y = -x - 2$$

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

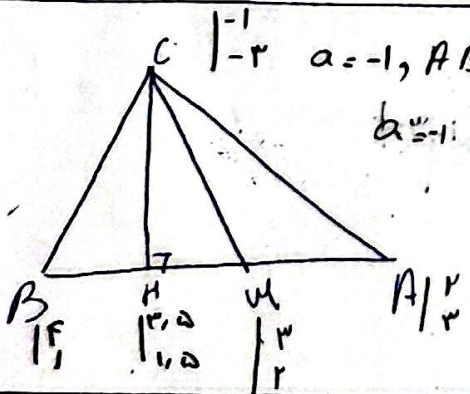
$$\begin{cases} xy - x = 1 \\ -xy - \alpha x = 1 \end{cases}$$

$$\left\{ \begin{array}{l} y - \frac{1}{1}x = \frac{1}{-1} \\ y - \frac{\alpha}{1}x = \frac{1}{-1} \end{array} \right\} \xrightarrow{a=1} \begin{cases} xy - x = 1 \\ -xy - \alpha x = 1 \end{cases} \rightarrow xy - 2x = 1 \rightarrow xy - x = 1$$

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

$$d = \frac{|1-1|}{\sqrt{1+1}} = \frac{0}{\sqrt{2}} = 0 \rightarrow r = \frac{1}{\sqrt{2}} \rightarrow S = \pi r^2 = \pi \times \frac{1}{2} = \frac{\pi}{2}$$

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$$a = -1, AB = y - 1 = -1(x-1) \rightarrow y = -x + 1 + 1 \rightarrow y = -x + 2$$

$$a = -1 \rightarrow a' = 1 \quad y + 1 = 1(x+1) \rightarrow y = x + 1 - 1 \rightarrow y = x$$

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

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

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$$(m+1)x - (1m-1)y + 1 = 0 \rightarrow \frac{m+1}{1m-1} = 1$$

$$\frac{m+1}{1m-1} = \frac{1-m}{1m-1}$$

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$$(1m-1)x + (1-m)y - 1 = 0 \rightarrow \frac{1m-1}{-1+m} = 1$$

$$1m^2 + m - 1 = -1m^2 + 1m - 1 \rightarrow 2m^2 - 1m + 1 = 0 \rightarrow \Delta < 0$$

این دو خط موازی است

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$$\begin{cases} AB = x + ry = r \\ AC = y + rx = 1 \\ BC = x + y = \varepsilon \end{cases} \quad \left\{ \begin{array}{l} A \left| \begin{array}{l} 1 \\ 1 \end{array} \right. \quad B \left| \begin{array}{l} \omega \\ -1 \end{array} \right. \quad \textcircled{1} \quad \mu = \left| \begin{array}{l} \frac{1}{r} \\ \frac{1}{r} \end{array} \right| \end{array} \right.$$

$$AH = \sqrt{\left(1 - \frac{1}{r}\right)^2 + \left(1 - \frac{1}{r}\right)^2} = \frac{\sqrt{2}}{r}$$

$$AH = \frac{|1 + 1 - \varepsilon|}{\sqrt{2}} = \frac{r}{\sqrt{r}} = \sqrt{r}$$

$$\frac{AH}{AH} = \frac{\frac{\sqrt{2}}{r}}{\sqrt{r}} = \frac{\sqrt{2}}{r\sqrt{r}} = \frac{\sqrt{2}}{r}$$

$$\left| \begin{array}{c} A \\ 0 \end{array} \right|, \left| \begin{array}{c} B \\ 0 \end{array} \right| \quad y - 0 = -\frac{1}{r}(x - A) \rightarrow y = -\frac{1}{r}x + \frac{A}{r} + B \quad \left\{ \begin{array}{l} AB = \sqrt{A^2 + B^2} = \sqrt{2} \end{array} \right.$$

$$\frac{x}{A} + \frac{y}{B} = 1 \rightarrow \frac{x}{rB} + \frac{y}{B} = 1 \rightarrow x + ry = rB \rightarrow \frac{rB}{r} = \frac{|a + 0 - rB|}{\sqrt{2}}$$

$$a = \frac{rB - 0}{0 - A} = \frac{B}{A} = -\frac{1}{r} \rightarrow A = rB \rightarrow |1 - rB| = 1 \rightarrow \left\{ \begin{array}{l} rB = 1 \rightarrow B = \omega \rightarrow a = 1 \\ -rB = 1 \rightarrow B = -\omega \rightarrow a = -1 \end{array} \right.$$

$$my - (x - rm) = 0 \rightarrow x = \frac{m}{r} \rightarrow \frac{a}{r} \Rightarrow m = -\omega$$

$$y + mx = x + r = 0 \rightarrow x = \frac{r}{1 - m} \rightarrow \frac{a}{r} \Rightarrow m = \frac{q}{\omega}$$

$$m = -\omega, m = \frac{q}{\omega} \Rightarrow -\omega = \frac{q}{\omega} \Rightarrow -\omega^2 = q$$

$$SD = \left| \frac{m^r - m + r}{r(m-1)} \right| \left| r \frac{1}{r} \right| = \frac{a}{r}$$

$$\hookrightarrow m = r, m^r + r_{m-1} = 0$$

$$r_{x-1} = -r$$

$$y = rx - r \quad m = r \quad y = rx - r \xrightarrow{x=0} \left\{ \begin{array}{l} 0 \\ -r \end{array} \right\}$$

$$\mu \left| \begin{array}{l} r \\ -r \end{array} \right| \quad y + 1 = r(x - \varepsilon) \Rightarrow y = rx - r$$

$$\left\{ \begin{array}{l} r = \frac{0 + x'}{r} \rightarrow x' = r \\ -r = \frac{-r + y'}{r} \rightarrow y' = -1 \end{array} \right\} \left\{ \begin{array}{l} r \\ -1 \end{array} \right\}$$

$$A \left| \begin{array}{l} 1 \\ r \end{array} \right. \quad y = x + a \quad A(a, b) \quad rb - a = ?$$

$$x_B = \frac{1 + a}{r} = -1 - a = -r \quad \left\{ \begin{array}{l} A \left| \begin{array}{l} -r \\ r \end{array} \right. \end{array} \right.$$

$$y_B = \frac{1 + b}{r} = +r \rightarrow b = r$$

$$rb - a = 1r + r = 1\omega$$