

$$\frac{m-k}{\varepsilon+2} = \frac{-1}{2} \Rightarrow \frac{k-3}{-1} = m \Rightarrow -3 = m-k \Rightarrow AB = \sqrt{\underbrace{(m-k)^2}_{-3} + (2+\varepsilon)^2} = \sqrt{\varepsilon\omega}$$

$$\delta = (\sqrt{\varepsilon\omega})^2 = \varepsilon\omega$$

۱

$$AB = CD \Rightarrow m_{AB} = \frac{\varepsilon-1}{-1-3} = \frac{-2}{\varepsilon} \Rightarrow \frac{y+3-y}{-1-x-x} \Rightarrow x = \frac{2}{\varepsilon} \text{ و } m_{AB} = \frac{\varepsilon}{2} = \frac{y-\varepsilon}{\frac{2}{\varepsilon}-(-1)} \Rightarrow y = \frac{2\varepsilon}{\varepsilon}$$

$$\sqrt{(\frac{2\varepsilon}{\varepsilon}-\frac{2\varepsilon}{\varepsilon})^2 + (\frac{2\varepsilon}{\varepsilon}+\frac{2\varepsilon}{\varepsilon})^2} = \frac{2\omega}{\varepsilon} = d \Rightarrow \frac{2\omega}{\varepsilon} = \frac{\omega\omega}{\varepsilon} + 10 = \frac{\omega\omega}{\varepsilon}$$

۲

$$\tan 45^\circ = \sqrt{3} \Rightarrow \frac{2m}{m^2-1} = \sqrt{3} \Rightarrow \sqrt{3}m^2 + 2m - \sqrt{3} = 0 \Rightarrow m^2 + 2m - 3 \xrightarrow{\frac{-2 \pm \sqrt{4+12}}{2}} \frac{-2 \pm 4}{2} \xrightarrow{\text{استاندارد}} \frac{\varepsilon\sqrt{3}}{3}$$

۳

$$M_{BC} = \frac{11-3}{2-3} = 2 \Rightarrow y-3 = 2(x-2) \Rightarrow y = 2x-3 \Rightarrow \frac{|Ax_0+By_0+c|}{\sqrt{A^2+B^2}} = \frac{|2-9-3|}{\sqrt{\omega}} = \frac{10}{\sqrt{\omega}}$$

$$\frac{10\sqrt{\omega}}{\omega} = 2\sqrt{\omega}$$

۴

$$B_3, A_3 \text{ تقاطع} \Rightarrow -19 = 2(\frac{2-3x}{-1}) - 7x \Rightarrow -22 = -11x \Rightarrow x=2, y=1 \Rightarrow \begin{matrix} B \text{ دایره} \\ A \text{ خط} \end{matrix} \Rightarrow$$

۵

$$\frac{|Ax_0+By_0+c|}{\sqrt{A^2+B^2}} = \frac{|-9+4-17|}{\sqrt{14+4}} = \frac{22}{\omega} \Rightarrow BH = \frac{22}{\omega}$$

$$m = \frac{y+0}{\frac{-x}{\epsilon} - 0} = -\Lambda \Rightarrow y+y = -\Lambda(x) \rightarrow y = -\Lambda x - y \xrightarrow{\text{مقسوم علیه ضرب}} y = -y$$

$$\left[\frac{\sqrt{2}}{2} \right] \xrightarrow{\text{مقسوم علیه ضرب}} \frac{\sqrt{2}}{2} \xrightarrow{\text{مقسوم علیه ضرب}} \frac{\sqrt{2}}{2} \xrightarrow{\text{مقسوم علیه ضرب}} \frac{\sqrt{2}}{2}$$

6

$$m_1 = m_2 \Rightarrow a = \pm 1 \xrightarrow{\text{مقسوم علیه ضرب}} \begin{cases} y = x+1 \\ y = x \end{cases} \Rightarrow \frac{1-1}{\sqrt{2}} = \frac{\sqrt{2}}{2} \Rightarrow \sqrt{\frac{2}{2}} = \frac{\sqrt{2}}{2}$$

$$\text{حاصل} = \frac{\sqrt{2}}{2} \times \frac{\sqrt{2}}{2} = \frac{2}{4} = \frac{1}{2}$$

7

$$AB = AH = \frac{1\epsilon - 0 - i1}{\sqrt{1+9}} = \frac{\sqrt{10}}{10} \left\{ \sqrt{\frac{9}{10}} = \frac{3}{\sqrt{10}} \Rightarrow \max \delta = \frac{\frac{9}{\sqrt{10}} \times \frac{\sqrt{10}}{1}}{2} = \frac{9}{2} \right\}$$

$$AC = r$$

8

$$m = \frac{b-a}{-\frac{1}{r} + \frac{1}{r}} = \sqrt{r} \rightarrow b-a = \frac{\sqrt{r}}{y} \rightarrow d = \sqrt{(d-w)^2 + \left(\frac{1}{r} + \frac{1}{r}\right)^2} = \frac{1}{r} \xrightarrow{\text{مقسوم علیه ضرب}} \frac{\sqrt{2}}{2}$$

9

$$r_{\text{مجموع}} = \omega \Rightarrow m_M = \frac{0+\epsilon}{0+\psi} = \frac{\epsilon}{\psi} \xrightarrow{M+L} m_L = \frac{-\psi}{\epsilon}$$

$$\begin{cases} y-r = \frac{\epsilon}{\psi}(x+\epsilon) \\ y = \frac{\epsilon}{\psi}x + \frac{r\omega}{\psi} \end{cases} \Rightarrow \begin{cases} y + \frac{\psi}{\epsilon}x = -\frac{r\omega}{\epsilon} \\ y - \frac{\epsilon}{\psi}x = \frac{r\omega}{\psi} \end{cases} \Rightarrow \begin{cases} y = -1 \\ y = 1 \end{cases}$$

10