

$$\begin{aligned} \frac{y}{x} &= \frac{z}{\varepsilon} \rightarrow \frac{y+z}{x} = \frac{z+z}{\varepsilon} = \frac{11\sqrt{5}}{1} \\ \rightarrow 10 + z &= \varepsilon + \varepsilon\sqrt{5} = z = \varepsilon(1+\sqrt{5}) - 10 \\ z &= 2(1+\sqrt{5}) - 10 \\ \frac{S_2}{S_1} &= \frac{11(y+z)}{xy} = \frac{\varepsilon(10+z+2\sqrt{5}-10)}{1} = \frac{11(1+\sqrt{5})}{1} = \frac{2(1+\sqrt{5})}{\omega} \end{aligned}$$

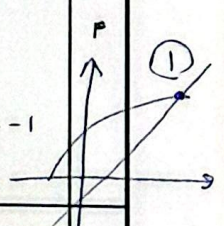
$$\begin{aligned} \frac{\sqrt{x^2+y^2}}{y} &= \frac{1+\sqrt{5}}{2} \rightarrow \sqrt{x^2+y^2} = y(1+\sqrt{5}) \rightarrow \varepsilon x^2 + \varepsilon y^2 = y^2(1+\sqrt{5})^2 \\ \rightarrow \varepsilon x^2 &= y^2 + 2y^2 + 5y^2 - \varepsilon y^2 \rightarrow \varepsilon x^2 = 2y^2(1+\sqrt{5}) \\ \frac{y}{11\sqrt{5}} &= \sqrt{\frac{2}{1+\sqrt{5}}} = \frac{y}{x} \end{aligned}$$

$$\begin{aligned} 9a + \sqrt{9a^2 + \varepsilon a} &\geq \varepsilon \rightarrow \sqrt{9a^2 + \varepsilon a} = \varepsilon - 9a \\ \rightarrow 9a^2 + \varepsilon a &= \varepsilon^2 - 18a\varepsilon + 81a^2 \rightarrow \varepsilon^2 - 18a\varepsilon + 72a^2 \\ 9a(a + \varepsilon) &\geq \frac{\varepsilon^2}{4} \rightarrow \varepsilon \geq 3a \rightarrow \frac{\varepsilon}{a} \geq 3 \end{aligned}$$

$$\begin{aligned} \frac{\sqrt{n+1}}{\sqrt{n-1} + 2} - \frac{\sqrt{n+1}}{2 - \sqrt{n-1}} &= \frac{n-1}{\sqrt{n-1}} \quad n > -1 \\ \frac{2\sqrt{n-1} \sqrt{n+1}}{n-1} &= \sqrt{n-1} \rightarrow \frac{2\sqrt{n+1}}{n-1} = 1 \rightarrow 2\sqrt{n+1} = n-1 \end{aligned}$$

$$\frac{1}{\sqrt{2-m}+2} + \frac{1}{\sqrt{2-m}-2} = \frac{\sqrt{2-m}}{\omega} \rightarrow \frac{2\sqrt{2-m}}{2-m-4} = \frac{\sqrt{2-m}}{\omega}$$

$$10 = -m - \varepsilon \rightarrow m = -12 \propto \text{مقدار}$$



$$\frac{1}{m^c} + \frac{1}{(1-m^c)} = \frac{14}{9}$$

$$\rightarrow \left(\frac{1}{m} - \frac{1}{m-1} \right)^r + r \left(\frac{1}{m^c - m} \right) - \frac{14}{9} = 0 \rightarrow \left(\frac{m-1-m}{m^c-m} + \frac{14}{9} \right) \left(\frac{-1}{m^c-m} - \frac{1}{9} \right) = 0$$

$$\rightarrow \left(\frac{-r+14m^c-14m}{9m^c-9m} \right) \left(\frac{-r-1-m^c+1-m}{9m^c-9m} \right) \rightarrow 14m^c-14m-r=0 \quad \Delta > \quad S = \frac{14}{9} = 1$$

$$-1 \cdot m^c + 1 \cdot m - r \quad \Delta < 0$$

$$\sqrt{m + \sqrt{-m^r + \epsilon m^c + r(m-1)}} + \sqrt{m^c + \sqrt{-m^c + 4m - 1}} = m + r$$

$$(r-m) (m-\epsilon) (m+\epsilon)$$

$$\begin{array}{c} -\epsilon \quad \epsilon \quad \epsilon \\ + \quad - \quad + \quad - \end{array}$$

$$\begin{array}{c} r \quad \epsilon \\ - \quad + \quad - \end{array}$$

$$\textcircled{A} \rightarrow \dots$$

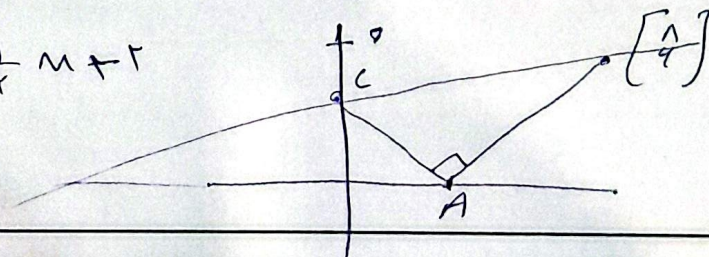
$$y = |m+c| + |m-1| \rightarrow 2y + m = 14 \rightarrow y = \frac{-m+14}{2}$$

$$\begin{cases} m > 1 \rightarrow 2y + 1 = \frac{-m+14}{2} \rightarrow 4m + 2 = -m + 14 \rightarrow m = c \\ -1 < m < 1 \rightarrow -m + 14 = 9 \rightarrow m = 5 \\ m < -1 \rightarrow -2m - 1 = \frac{-m+14}{2} \rightarrow -4m - 2 = -m + 14 \rightarrow m = -\epsilon \end{cases}$$

$$y = |m+c| + |m-1| \quad \begin{cases} m \geq c \rightarrow y = V \\ m = -\epsilon \rightarrow y = V \end{cases} \rightarrow \sqrt{(r+\epsilon)^2} = 4 - AB$$

$$y = \sqrt{m^c - \epsilon m + \epsilon} = \sqrt{(m-r)^2} = |m-r|$$

$$y = \frac{1}{r} m + r$$



$$AB = \sqrt{m^c + 4} = 9$$

$$AC = \sqrt{r^2} = r$$

$$1 \cdot r = 11$$

$$\frac{1}{m} + \frac{1}{m+1} = \frac{1}{r} \rightarrow \frac{r+m+1}{r(m+1)} = 1$$

$$\rightarrow m^c - r(m-1) = 0 \quad (m-r)(m+1) = 0$$

$$m = 4$$