

کیا جعفری

$$\textcircled{1} \quad \begin{cases} \frac{r+k}{r} = r \\ \frac{1-k}{r} = 1 \end{cases} \quad ? \quad \frac{1+k}{r-k} = \frac{1}{-r} = -v \Rightarrow m = \frac{1}{v}$$

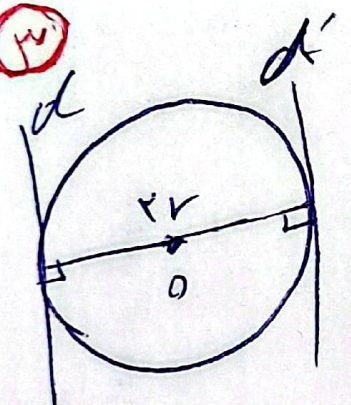
$$\frac{1}{v}x + b = y \Rightarrow \frac{r}{v} + b = 1 \Rightarrow b = \frac{r}{v} \Rightarrow \frac{1}{v}x + \frac{r}{v} = y$$

$$\textcircled{2} \quad BC = \sqrt{(k-1)^2 + (v-r)^2} = \sqrt{20} = \textcircled{5}$$

$$S_{\Delta} = \frac{1}{r} \begin{vmatrix} -1 & -k & r \\ r & v & 1 \\ 1 & 1 & 1 \end{vmatrix} = +10 = \frac{\Delta \times Ah}{r} \Rightarrow Ah = r$$

$$\Delta - r = \textcircled{1}$$

$\textcircled{3}$



$$\begin{cases} ry - ax - r = 0 \\ ry - x - v = 0 \end{cases} \Rightarrow \begin{cases} ry - rx - r = 0 \\ ry - rx - 1k = 0 \end{cases}$$

$$\Rightarrow \frac{|-1k|}{\sqrt{r_0}} = r \Rightarrow \frac{v}{\sqrt{r_0}} = r \Rightarrow \frac{r_0 r}{r_0} = r$$

$$\textcircled{4} \quad \begin{cases} \frac{r+k}{r} = r \\ \frac{1+k}{r} = r \end{cases} \quad \frac{r-1}{r-k} = \frac{r}{-r} = -1 = \begin{cases} -x + \Delta = y \\ \Rightarrow x + r = y \end{cases}$$

$$\sqrt{(r_0 - r)^2 + (r - 1/0)^2} = \sqrt{(r_0)^2 + (r_0)^2} \quad -x + \Delta = x - r$$

$$\Rightarrow \textcircled{\frac{\sqrt{2}}{r}} \quad \Rightarrow rn = v \Rightarrow \begin{cases} x = r_0 \\ y = 1/0 \end{cases}$$

$$\textcircled{5} \quad \frac{rm - r}{\Delta - m} = \frac{rm - r}{m + 1} \Rightarrow rm^2 + rm + rm - r = -rm^2 + rm + \Delta m - r$$

$$\Rightarrow \Delta m^2 - 1rm - 1r = 0 \Rightarrow \frac{1}{\Delta} \textcircled{-1}$$

$$\begin{cases} y = rx - 1 \\ x + y = r \end{cases} \Rightarrow x + rx - 1 = r \Rightarrow x = \frac{r+1}{r+1} = 1 \Rightarrow y = r-1$$

$$\begin{cases} y = rx - 1 \\ x + y = r \end{cases} \Rightarrow x + rx - 1 = r \Rightarrow rx = r+1 \Rightarrow x = \frac{r+1}{r} \Rightarrow y = \frac{r}{r} = 1$$

$$\textcircled{v} \quad ax + by + c = 0, \quad \frac{-a}{b} = \frac{-1}{r} \Rightarrow ra = b$$

$$\Rightarrow ax + by + c = 0$$

$$\frac{x}{a} + \frac{y}{b} = 1$$

$$\textcircled{v} \quad \frac{x}{a} + \frac{y}{b} = 1 \Rightarrow bx + ay = ab, \quad \frac{-b}{a} = \frac{-1}{r} \Rightarrow rb = a$$

$$\Rightarrow bx + rby = ab \Rightarrow x + ry = a = 0 \Rightarrow \frac{|a|}{\sqrt{a^2}} = \sqrt{r^2}$$

$$\Rightarrow |a| = b \quad a = +b \text{ or } -b \Rightarrow b = r_0 \text{ or } -r_0$$

$$\Rightarrow \sqrt{1.0^2 + r_0^2} = \sqrt{1.0 + r_0^2} = r\sqrt{1.0}$$

$$\textcircled{A} \quad \begin{cases} y = \frac{r}{m}x + r \\ y = (1-m)x + r \end{cases} \Rightarrow \textcircled{B} \text{ است } \Rightarrow \frac{\Delta}{r} = \frac{r \times \square}{r} \Rightarrow \square = \frac{\Delta}{r}$$

$$\Rightarrow 0 = \frac{r}{m}x + r \Rightarrow -r = \frac{r}{m}x \Rightarrow \frac{-r \times m}{r} = \frac{-m}{r}$$

$$0 = (1-m)x + r \Rightarrow \frac{-r}{1-m} = x \Rightarrow x = \frac{r}{m-1}$$

$$\left| \frac{r}{m-1} + \frac{r}{r} \right| = \frac{\Delta}{r} \Rightarrow \left| \frac{r + m^2 - m}{rm - r} \right| = \frac{\Delta}{r}$$

$$\Rightarrow \frac{r + m^2 - m}{rm - r} = \frac{\Delta}{r} \Rightarrow 1 + m^2 - m = 1.0m - 1.0$$

$$rm^2 - 1.2m + 1.0 = 0 \Rightarrow m^2 - 1.2m + 1.0 = 0 \Rightarrow (m-1)^2 = \boxed{m=1}$$

$$\frac{r + m^2 - m}{rm - r} = \frac{-\Delta}{r} \Rightarrow 1 + m^2 - m = -1.0m + 1.0$$

$$\Rightarrow rm^2 + 1.0m - 1.0 = 0 = P = \textcircled{-1} \Rightarrow -1 \times r = \textcircled{-r}$$

$$m = \frac{r_0}{r \times r} \Rightarrow m = \frac{1.0}{r} \Rightarrow Am = \sqrt{\left(\frac{1.0}{r} - 1\right)^2 + \left(1 - \frac{r}{r}\right)^2} = \frac{\sqrt{5.0}}{r}$$

$$\frac{\Delta y}{\Delta x} = \frac{-1.0}{r} = -1 \Rightarrow \begin{cases} -x + r = y \\ x = y \end{cases} \Rightarrow -x + r = x \Rightarrow x = r \Rightarrow y = r$$

$$Am = \sqrt{(r-1)^2 + (r-1)^2} = \sqrt{r} \Rightarrow \frac{Am}{Am} = \frac{\frac{\Delta \sqrt{r}}{r}}{\frac{\sqrt{r}}{r}} = \frac{\Delta}{r}$$

ادامی سوال

$$\textcircled{4} \quad \begin{aligned} x' &= x - r \Rightarrow x' + r = x \Rightarrow y' - r = r(x' + r) - r \\ y' &= y + r \Rightarrow y' - r = y \Rightarrow y' = rx' + r \end{aligned}$$

$$\textcircled{10} \quad \begin{cases} y = -x + r \\ y = x + r \end{cases} \Rightarrow -x + r = x + r \Rightarrow rx = -r \Rightarrow x = -1 \\ y = r$$

$$\frac{x' + 1}{r} = -1 \Rightarrow x' + 1 = -r \Rightarrow x' = -r$$

$$\frac{y' + r}{r} = r \Rightarrow y' + r = r^2 \Rightarrow y' = r^2 - r$$

$$\Rightarrow (r + r = 1) \textcircled{10}$$