

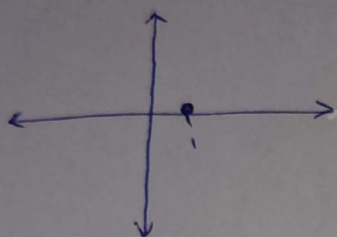
$$f = \left\{ (1, \frac{\varepsilon a}{2}), (1, a^2 + 3), (2, 3a) \right\}$$

با توجه به نام و نام خانوادگی

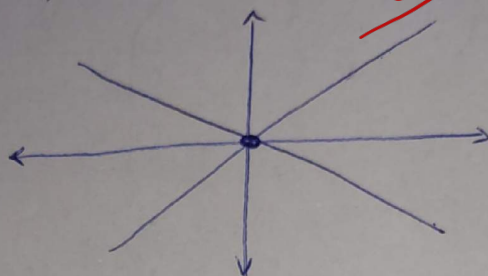
$$\begin{aligned} \varepsilon a &= a^2 + 3 \\ 0 &= a^2 + 3 - \varepsilon a \\ 0 &= (a-1)(a-3) \rightarrow \begin{cases} a=3 \\ a=1 \end{cases} \end{aligned}$$

الف) $|y| + \sqrt{2x-1} = 0$

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



الف)



ب) $2xy = x \xrightarrow{x=0} |y| = 1$

ج) $\sin^2 x + \cos^2 \frac{y}{2} = 1 \xrightarrow{x=0} \cos^2 \frac{y}{2} = 1 \rightarrow \cos^2 \frac{y}{2} = 1$

د) $y^2 - y = \frac{x^2}{2} \xrightarrow{x=0} y^2 - y = 0 \rightarrow y(y-1) = 0 \rightarrow \begin{cases} y=0 \\ y=1 \end{cases}$

ه) $|y-1| = \sqrt{2x-2} \xrightarrow{x=3} |y-1| = \sqrt{2} = 1 \rightarrow y-1 = \pm 1 \rightarrow \begin{cases} y=2 \\ y=0 \end{cases}$

الف) $x^2 + |y-1| = \varepsilon x \rightarrow \begin{cases} y_1^2 = -3x \\ y_2^2 = -3x \end{cases} \xrightarrow{x_1=x_2} y_1 = y_2$

ب) $|y-1| = \varepsilon x - x^2$

ج) $x=1 \rightarrow |y-1| = \varepsilon(1) - (1)^2$

د) $|y-1| = \varepsilon - 1 = 3 \rightarrow y-1 = 3, y-1 = -3$

