

$$\frac{f+r}{r} = 3, \quad \frac{1-r}{r} = 1 \Rightarrow (3, 1) \text{ وسط } AB \text{ را نشان می‌دهد} \Rightarrow y = \frac{1}{2}x + \frac{1}{2}$$

$$\frac{-\frac{1}{2} - 1}{\frac{1}{2} - 3} = \frac{-\frac{3}{2}}{-\frac{5}{2}} = -\frac{3}{-5} = \frac{3}{5} \Rightarrow \frac{1}{2} = a$$

$$\Rightarrow (3, 1) \Rightarrow 1 = \frac{3}{2} + b \Rightarrow b = \frac{1}{2}$$

$$y = \frac{1}{2}x + \frac{1}{2}$$

$$|BC| \sqrt{(V-3)^2 + (-1+1)^2} = \sqrt{16+0} = 4 \quad (1)$$

$$BC \text{ را به } \frac{V-3}{-1+1} = \frac{f}{-3} = a \text{ و } b \Rightarrow y = -\frac{f}{3}x + b \xrightarrow{(-1, 3)} 3 = \frac{f}{3} + b \Rightarrow b = \frac{9-f}{3} \Rightarrow y = -\frac{f}{3}x + \frac{9-f}{3}$$

$$a - r = \frac{3}{5}$$

$$\Rightarrow \frac{|3y + fn - 9|}{\sqrt{9+16}} \xrightarrow{(3, 1)} \frac{3 + 12 - 9}{5} = \frac{6}{5} = r(2)$$

$$a = a' \Rightarrow y - x = 1$$

$$b = b' \Rightarrow y - ax = 1 \Rightarrow y - \frac{1}{2}x = 1$$

$$c = c' \Rightarrow y - ax = 1$$

$$\frac{1-c-c'}{r} = \frac{V-1}{r} = 3 \Rightarrow \frac{V-1}{r} = 3$$

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$$x^2 = x(\frac{1}{2}x)^2$$

$$\frac{1}{2}x^3$$

$$\frac{r-1}{r-2} = \frac{r}{-r} \Rightarrow a_{AB} \Rightarrow y = -x + b \xrightarrow{(3, 1)} 1 = -3 + b \Rightarrow b = 4 \Rightarrow y = -x + 4$$

$$\frac{|8+x-4|}{\sqrt{2}} = \frac{|4+x-4|}{\sqrt{2}} = \frac{x}{\sqrt{2}} \quad x = \frac{r+f}{r} = \frac{r+1}{r} = (3, 2) \quad \sqrt{(2+3)^2 + (2+0)^2} = \sqrt{25+4} = \sqrt{29}$$

$$(m^2 - 4n^2) = 4m^2 \Rightarrow (\sqrt{f})^2 - (\frac{1}{\sqrt{f}})^2 = 4(1 - \frac{1}{f}) = \frac{4f-4}{f} = \frac{4}{f} = \sqrt{\frac{4}{f}} = \frac{2}{\sqrt{f}} \Rightarrow \sqrt{\frac{4}{f}}$$

$$(\Delta - m)y = (r - m)x + v \Rightarrow y = \frac{r-m}{\Delta-m}x + \frac{v}{\Delta-m} \quad \frac{m+1}{r-m} \times \frac{r-m}{\Delta-m} = \frac{r-m}{1-m-r-m} = -1$$

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

$$\Rightarrow -m^2 - m + r = r^2 - 1 - m + r \Rightarrow \omega m^2 - 1 - m + 1 = 0$$

$$B \begin{cases} x + y = 3 \\ -x - y = -1 \end{cases} \Rightarrow y = -1, x = 4$$

$$\begin{cases} y - 2x = -1 \\ x + y = 1 \end{cases} \Rightarrow x = \frac{1}{3}, y = \frac{2}{3}$$

$$A \begin{cases} x + y = 3 \\ y - m = -1 \end{cases} \Rightarrow y = 1, x = 2$$

$$AH = \frac{|x+y-1|}{\sqrt{a^2+b^2}} \xrightarrow{(1, 1)} \frac{1+1-1}{\sqrt{2}} = \frac{1}{\sqrt{2}} = \sqrt{2} \quad \frac{\frac{1}{\sqrt{2}} + 0}{r} = \frac{1}{\sqrt{2}r} \quad \frac{\frac{1}{\sqrt{2}} + (-1)}{r} = \frac{1-\sqrt{2}}{r} \Rightarrow \sqrt{(\frac{1}{\sqrt{2}}-1)^2 + (\frac{1}{\sqrt{2}}-1)^2} = \frac{\sqrt{2}}{r}$$

$$\Rightarrow \frac{\Delta \sqrt{2}}{r} \quad \frac{AM}{AH} = \frac{\frac{\Delta \sqrt{2}}{r}}{\frac{1}{\sqrt{2}}} = \frac{\Delta}{r}$$



$$y = -\frac{x}{r} + b \Rightarrow \frac{|y - \frac{x}{r} - b|}{\sqrt{\frac{1}{r^2} + 1}} \quad \sqrt{r^2} \Rightarrow |b| = \sqrt{\frac{1}{r^2} + 1} \Rightarrow \Delta = |b| \Rightarrow b = \Delta$$

$$-\frac{1}{r} = \frac{\Delta}{-x} \Rightarrow x = \Delta \Rightarrow m = 1$$

$$\sqrt{(1-0)^2 + (-\Delta)^2} = \sqrt{1+\Delta^2} = \sqrt{1+\Delta^2} = \sqrt{\Delta^2+1}$$

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

$(1-h)x + r = \frac{r}{m}x + r \Rightarrow x_1 = \frac{r}{m-1}$
 $\frac{r}{m}x + r = \frac{r}{m}x + r \Rightarrow x_2 = \frac{r}{m}$
 $|x_2 - x_1| = \left| \frac{r}{m-1} - \frac{r}{m} \right| = \left| \frac{r}{m-1} + \frac{r}{r} \right| = \left| \frac{r}{m-1} + 1 \right|$
 $\frac{\Delta}{|x_2 - x_1|} = \frac{1}{\left| \frac{r}{m-1} + 1 \right|}$
 $\frac{r}{m-1} + \frac{r}{r} = -\frac{r}{r} \Rightarrow m = -2\sqrt{8}, m = 2\sqrt{8}$
 $3 \times (-2\sqrt{8})(2\sqrt{8}) = -3$

$\frac{|y - rx + r|}{\sqrt{a^2 + b^2}} = \frac{r}{\sqrt{8}} \Rightarrow \frac{|-r - rx + r|}{\sqrt{8}} = \frac{r}{\sqrt{8}} \Rightarrow \frac{r}{\sqrt{8}} = \frac{r}{\sqrt{8}} \Rightarrow \frac{r - c'}{\sqrt{a^2 + b'^2}} = \frac{r}{\sqrt{8}}$
 $\Rightarrow \frac{r}{\sqrt{8}} = \frac{|-r - c'|}{\sqrt{1+1}} = \frac{|-r - c'|}{\sqrt{2}} \Rightarrow r = |-r - c'|$
 $-r = -r - c' \Rightarrow r = c' \times$
 $r = -r - c' \Rightarrow r = c' /$



$a = -1$ فرضاً
 $y = x + 5$
 $y = -x + r \Rightarrow y = r, a = -1$
 $-1 = \frac{x+1}{r} \Rightarrow x = -r \Rightarrow f = \frac{r+5}{r} \Rightarrow 0 = 4$
 $= (4)r - (-r) = 1r + r = 1\Delta$