

$\frac{x}{y} = \frac{5}{\sqrt{5}} \rightarrow \frac{\omega + m}{r} = \frac{1 + \sqrt{5}}{2} \Rightarrow 10 + 2m = r + r\sqrt{5}$

$m - 9 + r\sqrt{5} = 0 \Rightarrow m = 9 - r\sqrt{5}$

$\delta_{\text{مستقیم}} = 10n$, $\delta_{\text{مخالف}} = r(\omega + \sqrt{5} - 1) = 1 + \sqrt{5}n$

$\frac{r(1 + \sqrt{5})n}{r.n} = \frac{1 + \sqrt{5}}{5}$

وقت!

[illegible]

$$r_a + \sqrt{r_a^2 + 4a^2} = r \quad a = \frac{r}{\sqrt{2}} \Rightarrow \frac{\frac{r}{\sqrt{2}} + \frac{v}{\sqrt{2}}}{\frac{r}{\sqrt{2}}} = \frac{\frac{r}{\sqrt{2}}}{\frac{r}{\sqrt{2}}} \Rightarrow \frac{r+v}{r} = 1 \quad \checkmark$$

$\frac{x-1}{\sqrt{x-1}} \cdot \sqrt{x-1} \Rightarrow \frac{\sqrt{x+1}}{\sqrt{x-1} + r} - \frac{\sqrt{x+1}}{-\sqrt{x+1} + r}$, $\sqrt{x-1}$

$\frac{\sqrt{x+1}(r-\sqrt{x+1}) - \sqrt{x+1}(\sqrt{x-1}+r)}{r^2-x-1} = \frac{\sqrt{x+1}(-r-\sqrt{x-1})}{1-rx} = \frac{-\sqrt{x+1}(\sqrt{x-1}+r)}{1-rx}$

$\frac{-\sqrt{x+1}(\sqrt{x-1}+r)}{1-rx} < \sqrt{x-1}$

$x \geq 10$

$x=12$ ✓ $x=11$ ✓ $x=10$ ✓

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$\frac{1}{\sqrt{r-x} + r} = \frac{1}{r - \sqrt{r-x}} \cdot \frac{r+x}{r+x}$

$\frac{\cancel{r-x}}{\omega x} = \frac{-rx}{x-r} \Rightarrow \frac{1}{x-r} = \frac{-r}{x-r} \Rightarrow x-r=0 \Rightarrow x=r$

$\alpha^k - 1 \neq 0 \Rightarrow \alpha^k = 1 \Rightarrow \alpha = 1$

$\sqrt{r-x} = \sqrt{rs} \Rightarrow x = -17$

$$\frac{1}{x^2} + \frac{1}{(1-x)^2} = \frac{14}{9} \Rightarrow \frac{1-x^2 + x^2}{x^2(1-x^2)} = \frac{14}{9} \Rightarrow \frac{1-x^2 + x^2}{x^2(1-x^2)} = \frac{14}{9} \Rightarrow 1-x^2 + x^2 = \frac{14}{9} x^2(1-x^2)$$

$$9 - 18x^2 + 18x^4 = 14x^2 - 14x^4 \Rightarrow 14x^4 - 14x^2 + 9 = 0$$

$$-\frac{-14}{14} = 2 = -\frac{b}{a}$$

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$$-x^5 + 2x^4 + 2x^3 - 10x^2 = 0 \Rightarrow x^2(x^3 - 2x^2 - 2x + 10) = 0$$

$$x^3 - 2x^2 - 2x + 10 = 0$$

از دامنه عبارت کسر می بینیم

$$x^2 x^2 x^2$$

$$-(x-2)(x+5) \leq 0$$

البته با جابجایی در عبارت درجه 3 می توان همین نتیجه را گرفت

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$$\sqrt{x+5} + \sqrt{14+5} = x+2 \Rightarrow \sqrt{x+5} + \sqrt{19} = x+2$$

$$y_1: 14-x \Rightarrow$$

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$$\begin{cases} 14-x = 2x+2 \\ 14-x = 9 \\ 14 = 2x+2 \\ x = 2 \end{cases}$$

$$\begin{aligned} x > 1 &\Rightarrow x+1 \\ x < -2 &\Rightarrow 3 \\ x < -2 &\Rightarrow -2x-1 \end{aligned}$$

$$A \begin{vmatrix} -2 \\ 1 \\ 0 \end{vmatrix}$$

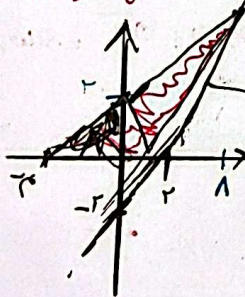
$$AB = \sqrt{4x^2 + 5y^2}$$

$$AB = 2\sqrt{10}$$

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$$y_2: \frac{1}{x} + \frac{1}{x+2} \Rightarrow \frac{x^2}{x} + \frac{x^2}{x+2} = \frac{x^2}{x} + \frac{x^2}{x+2}$$



$$L_2$$

$$\begin{vmatrix} 1 & 1 & 0 \\ 1 & 1 & 1 \\ 1 & 1 & 1 \end{vmatrix} = 0$$

$$\begin{aligned} A & \begin{vmatrix} 1 \\ 1 \\ 0 \end{vmatrix} \\ B & \begin{vmatrix} 1 \\ 1 \\ 1 \end{vmatrix} \\ C & \begin{vmatrix} 1 \\ 1 \\ 1 \end{vmatrix} \end{aligned}$$

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بروز رسانی

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

$$\left(\frac{1}{x+2} + \frac{1}{x} + \frac{1}{2} \right) \geq 20(x+9) + 20x = x(x+9) \Rightarrow 20x + 180 + 20x = x^2 + 9x$$

$$20x + 180 + 20x = x^2 + 9x$$

$$x^2 - 11x - 180 = 0$$

$$(x+5)(x-36) \Rightarrow x=36$$

بروز رسانی می شود

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