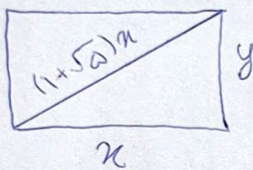


$$\varepsilon x \omega = 20$$

$$\varepsilon x \frac{1+\sqrt{5}}{2} = 2 + 2\sqrt{5}$$

$$\varepsilon x (2+2\sqrt{5}) = 1+8\sqrt{5}$$

$$\frac{A+A\sqrt{5}}{\omega-20} = \frac{2+2\sqrt{5}}{\omega} \checkmark$$



$$x^2 + y^2 = x^2 + 0x^2 + 2\sqrt{5}x^2$$

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

$$\frac{x^2}{y^2} = \frac{1}{4+2\sqrt{5}}$$

ما همین نسبت رو می‌خواهیم!

$$\frac{y}{x} = \frac{2}{1+\sqrt{5}}$$

$$\sqrt{2a^2 + \varepsilon a} = -2a + 2$$

$$2a^2 + \varepsilon a = 4a^2 - 4a + 2$$

$$2a^2 - 4a + \varepsilon = 0$$

$$(2a-2)(a-1) = 0$$

$$a = \begin{cases} \frac{2}{2} \\ 1 \end{cases} \checkmark$$

$$\sqrt{n^2-1} - \sqrt{n^2-1} = n-1$$

$$\frac{\sqrt{n+1}}{\sqrt{n-1}+2} - \frac{\sqrt{n+1}}{-\sqrt{n-1}+2} = \sqrt{n+1}$$

$$\frac{1}{\sqrt{n-1}+2} - \frac{1}{2-\sqrt{n-1}} = 1$$

$$n = 12 - 2\sqrt{5} \text{ و } 12 + 2\sqrt{5}$$

$$\varepsilon n - \varepsilon = x^2 - 2 \cdot n + 100$$

$$x^2 - 2\varepsilon n + 10 \cdot \varepsilon = 0$$

$$x^2 - \sqrt{n-1} - 2 - \sqrt{n+1} = 100 - n$$

$$\frac{1}{t+2} - \frac{1}{2-t} = \frac{t^2}{0t} = \frac{t}{\omega}$$

$$x - 0 + -(0t + 10) = \varepsilon t - t^2$$

$$t^2 + 4t = 0 \quad t=0 \Rightarrow n=4 \quad \checkmark \checkmark \checkmark$$

$$\frac{1}{x^2} + \frac{1}{x^2 - 2x + 1} = \frac{14}{9} \quad \text{جمع رشتہ کا (ایکجا رشتہ کر دیا)} \quad \frac{34}{14} = 2 \quad \checkmark$$

$$x^2 - 2x + 1 + x^2 = \frac{14}{9} \times x^2 - 2x + 1 \quad 14x^2 - 32x + 10 = 0$$

(۲)

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$$\sqrt{x + \sqrt{(x-2)^2 \times (x-4)}} + \sqrt{x^2 + \sqrt{(x-2)(x+4)(x-1)}} = x+2$$

$$\frac{4}{-4+4} = 4$$

$$\frac{2}{-0} + \frac{4}{0} = -$$

جواب

تساوی کا قانون درجہ اولیٰ کا ہے۔

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$$y = |x+2| + |x-1|$$

$$y = 7$$

$$-2 > x \rightarrow -x-2+x+1 \rightarrow y = -x-1$$

$$x = -4 \quad \text{در بازہ مورد نظر}$$

$$-2 < x < 1 \rightarrow 2+x-x+1 \rightarrow y = 3$$

$$y = 17-x$$

$$AB = \sqrt{(7-2)^2 + (2-(-4))^2} = \sqrt{25+36} = \sqrt{61}$$

$$1 < x < \infty \rightarrow 2x+2-1 \rightarrow y = 2x+1$$

$$4x+2=17-4x \rightarrow 8x=15 \rightarrow x=1.875$$

$$y=0 \rightarrow x=2 \quad \text{دوبارہ مورد نظر}$$

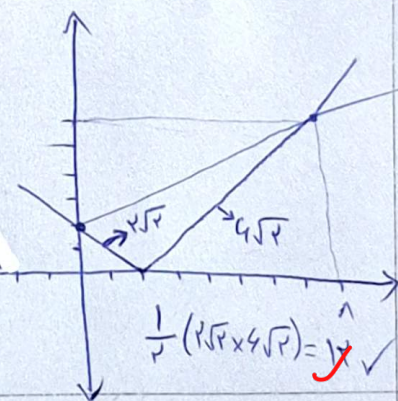
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$$\frac{1}{2}x+2 = \sqrt{(x-2)^2} = |x-2|$$

$$2 < x \rightarrow \frac{1}{2}x+2 = x-2 \Rightarrow x=4, y=4$$

$$x < 2 \rightarrow \frac{1}{2}x+2 = 2-x \Rightarrow x=0, y=2$$



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$$\frac{1}{x-9} + \frac{1}{x} = \frac{1}{20}$$

$$x-9 = 44 \quad \checkmark$$

$$20x + 20(x-9) = x^2 - 9x$$

$$x = 44 \quad \checkmark$$

(۲)

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$$\sqrt{n+1} \left(\frac{1}{\sqrt{n-1}+3} - \frac{1}{3-\sqrt{n-1}} \right) = \sqrt{n+1} \left(\frac{-2\sqrt{n-1}}{9-(n-1)} \right) = \frac{n-1}{\sqrt{n-1}}$$

$$\sqrt{n+1} \left(\frac{-2\sqrt{n-1}}{10-n} \right) = \sqrt{n-1} \Rightarrow -2\sqrt{n+1} = 10-n \xrightarrow[n \geq 10]{\text{توان 2}}$$

$$n^2 - 24n + 94 = 0 \rightarrow n = 12 \mp 4\sqrt{3} \rightarrow \boxed{12 \pm 4\sqrt{3} \text{ ق ق}}$$

$$\frac{2 - \sqrt{2-n} - \sqrt{2-n} - 2}{4 - (2-n)} = \frac{-2\sqrt{2-n}}{2+n} = \frac{2-n}{5\sqrt{2-n}}$$

مخرج دو صفر میبند!

طرفین و بطن $\rightarrow -10(2-n) = 4-n^2 \rightarrow n^2 + 10n - 24 = 0 \rightarrow \begin{cases} n=2 \times \\ n=-12 \times \end{cases}$

سوال ریسه ها قیاسا رو من خواص!