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گروه انزیم دقت C

کلیف لایه البراهیم شماره ۱۸

عرض و طول x

$$S_1 = \sum k \times \delta k = 2 \cdot k^2$$

$$\frac{x}{y} = \frac{a}{r} \rightarrow y = rk$$

$$x = dk$$

$$\frac{x'}{y} = \frac{1+\sqrt{5}}{r} \quad y = rk \quad x' = \sum k(1+\frac{\sqrt{5}}{r})$$

$$= S_2 = \sum k \times \sum k(1+\frac{\sqrt{5}}{r}) = 14k^2(\frac{1+\sqrt{5}}{r})$$

$$\frac{S_2}{S_1} = \frac{14k^2(\frac{1+\sqrt{5}}{r})}{2 \cdot k^2} = \frac{r}{2} \left(\frac{1+\sqrt{5}}{r} \right) = \boxed{\frac{r}{2} (1+\sqrt{5})}$$

عرض و طول x

$$\text{قطر} = \sqrt{x^2 + y^2}$$

$$\frac{\text{قطر}}{\delta \text{ طول}} = \frac{1+\sqrt{5}}{r}$$

$$\frac{\sqrt{x^2 + y^2}}{x} = \frac{1+\sqrt{5}}{r} \Rightarrow \frac{x^2 + y^2}{x^2} = \frac{(1+\sqrt{5})^2}{r^2} \xrightarrow[\text{درمفوج}]{\text{تفصیل صفر}} \frac{y^2}{x^2} = \frac{(1+\sqrt{5})^2 - r^2}{r^2}$$

$$\frac{y^2}{x^2} = \frac{1+5+2\sqrt{5}-r^2}{r^2} = \frac{r^2+2\sqrt{5}}{r^2} = \frac{1+\sqrt{5}}{r} \Rightarrow \boxed{\frac{x^2}{y^2} = \frac{r}{1+\sqrt{5}}}$$

$$\sqrt{2a^2 + 2a} = 2 - 3a$$

$$2a^2 + 2a = 4 - 12a + 9a^2 \Rightarrow 7a^2 - 14a + 2 = 0 \Rightarrow a^2 - 2a + \frac{2}{7} = 0$$

$$(a - \frac{1}{7})(a - \frac{2}{7}) = 0 \Rightarrow a = \frac{1}{7} \text{ یا } \frac{2}{7}$$

$$\Rightarrow a = \frac{2}{7} \text{ قابل قبول} \checkmark$$

$$\frac{\frac{2+1}{7}}{\frac{2}{7}} \Rightarrow \frac{\frac{3}{7}}{\frac{2}{7}} \Rightarrow \frac{3}{2} = \boxed{1.5}$$

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

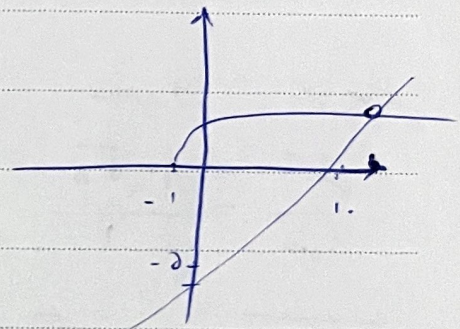
$$\rightarrow \frac{\sqrt{x+1} - \sqrt{x-1} - \sqrt{x-1} - \sqrt{x+1}}{10 - x} = \sqrt{x-1}$$

$$\frac{-2\sqrt{x-1}}{10-x} = \sqrt{x-1} \quad \rightarrow \quad -2\sqrt{x-1} \sqrt{x+1} = (10-x)\sqrt{x-1}$$

بما $\sqrt{x-1} \neq 0$

$$-2\sqrt{x+1} = 10-x \rightarrow \sqrt{x+1} = \frac{x}{2} - 5$$

(بما $\sqrt{x+1} \geq 0$)



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

$$-1 \cdot (2-x) = x^2 + x \Rightarrow -2 + 10x = x^2 + x \Rightarrow x^2 + 10x - 2 = 0$$

$$(x+12)(x-2) = 0 \quad \rightarrow \quad x = -12 \text{ أو } x = 2$$

بما $x = 2$ هو الحل الوحيد

(جوابك نادر)

$$\left(\frac{1}{2}\right)^t + \left(\frac{1}{1-x}\right)^t = \frac{14}{9} \rightarrow \left(\frac{1}{x} + \frac{1}{1-x}\right)^t - 2\left(\frac{1}{x} \times \frac{1}{1-x}\right)^t = 0$$

$$\left(\frac{1-x+x^2}{x-x^2}\right)^t - \frac{2}{x-x^2} = \frac{14}{9} \rightarrow \frac{1}{x-x^2} = t$$

$$t^2 - 2t + 1 = \frac{14}{9} + 1 \quad (t-1)^2 = \frac{149}{9} \rightarrow t-1 = \pm \frac{\sqrt{149}}{3}$$

$$t = \frac{14}{9} \quad \frac{1}{x-x^2} = \frac{14}{9} \rightarrow S_1 = 1$$

$$t = -\frac{1}{9} \quad \frac{1}{x-x^2} = -\frac{1}{9} \rightarrow S_2 = 1$$

$$S_1 + S_2 = 2$$

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$$\sqrt{-x^2 + 4x - 1} \Rightarrow x^2 - 4x + 1 \leq 0 \Rightarrow (x-2)(x-4) \leq 0 \quad \checkmark$$

$$\frac{r}{+} \frac{r}{b-d} \frac{r}{+} \Rightarrow [r, r] \text{ (1)}$$

$$\sqrt{-x^2 + 2x^2 + 4dx - 1} \Rightarrow x^2 - 2x^2 - 4dx + 1 \leq 0 \Rightarrow (x^2 - 2dx) - (4x^2 - 1) \leq 0$$

$$\Rightarrow x(x^2 - 2d) - 2(x^2 - 2d) \leq 0$$

$$\frac{-d \quad r \quad d}{-d+d-r} \quad (-\infty, -d] \cup [2, d] \text{ (2)}$$

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

$$(1) \cap (2) \Rightarrow x = r$$

$$\sqrt{2} + \sqrt{-42 + 42 + 1} + \sqrt{14 + \sqrt{-14 + 42 - 1}} = 2 + r = 4$$

$$\boxed{x = 2}$$

دوباره
(-1, 2)

$$\frac{-r}{-x-r-x+1} \quad \frac{1}{x+r-x+1} \quad \frac{1}{x+r-x+1}$$

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

$$x = \frac{1}{r}$$

$$\begin{cases} y + rx = -1 \\ ry + x = 1 \end{cases}$$

$$-dx = r$$

$$x = -2$$

$$y = 1, B$$

$$\begin{cases} y - rx = 1 \\ ry + x = 1 \end{cases}$$

$$rx = 1$$

$$x = r$$

$$y = 2, A$$

$$AB = \sqrt{14x^2 + 14y^2} = \sqrt{14y + 2} = \sqrt{2}$$

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

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

$$-\frac{1}{r}x = -2 \Rightarrow x = \frac{1}{r} = 2 \Rightarrow A$$

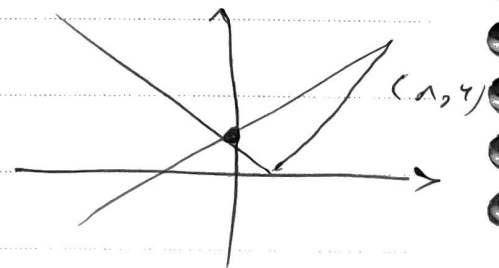
$$\frac{r}{r}x = 0 \Rightarrow x = 0$$

$$y = r$$

$$\text{Area} = \frac{|4 + 1 - 2|}{\sqrt{r}} = \frac{1\sqrt{r}}{r} = 4\sqrt{r}$$

$$BC = \sqrt{4 + 2} = 2\sqrt{2}$$

$$S = \frac{2\sqrt{2} \times 4\sqrt{2}}{2} = (12)$$



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$$\frac{1}{n} + \frac{1}{n+9} = \frac{1}{2} \Rightarrow 2(n+9) + 2n = n(n+9)$$

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

$$(n-14)(n+2) = 0$$

$$n = 14 \quad \checkmark \text{ قابل قبول}$$

$$n = -2 \quad \times \text{ غلط}$$

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14 است تا آنجا که
فرصت