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$$\frac{x}{y} = \frac{\partial}{\partial}$$

$$\frac{\partial + x}{1\cancel{x}} = \frac{1 + \sqrt{5}}{1}$$

$$\partial + x = 1 + \sqrt{5}$$

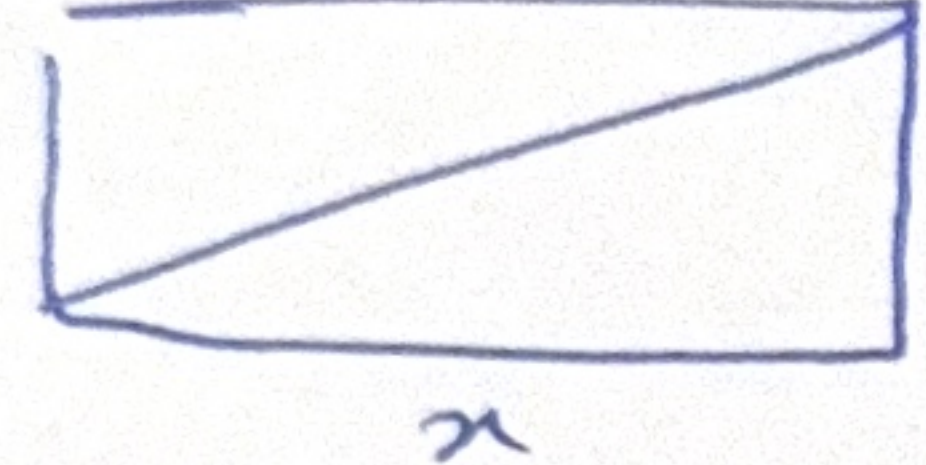
$$x = 1 + \sqrt{5} - \partial \xrightarrow{+\partial} 1 + \sqrt{5}$$

$$S = F \times \partial = 2$$

$$S' = (1 + \sqrt{5}) \times 1$$

$$\frac{S'}{S} = \frac{(1 + \sqrt{5}) \times 1}{2} = \frac{1(\sqrt{5} + 1)}{2}$$

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$$\frac{\sqrt{x^2 + y^2}}{x} = \frac{1 + \sqrt{5}}{1} \xrightarrow{\text{مربع}} \frac{x^2 + y^2}{x^2} = \frac{1 + 2\sqrt{5} + 5}{1}$$

$$1 + \frac{y^2}{x^2} = 6 + 2\sqrt{5}$$

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

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

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$$10a + \sqrt{10a^2 + 16a} = 2$$

$$\sqrt{10a^2 + 16a} = 2 - 10a$$

$$10a^2 + 16a = 4 - 40a + 100a^2$$

$$90a^2 - 56a + 4 = 0$$

$$\Delta = 3136 - 1440 = 1696$$

$$\frac{a+1}{a} = ?$$

$$\frac{14 \pm 12}{14} \Rightarrow 1) 2 \rightarrow 4 + \sqrt{1+1} = 2$$

$$2) \frac{2}{3} \rightarrow \frac{4}{3} + \sqrt{\frac{1}{9} + \frac{1}{9}} = 2$$

$$\text{if } a = \frac{2}{3} \Rightarrow \frac{a+1}{a} = \frac{\frac{2}{3} + 1}{\frac{2}{3}} = \frac{\frac{5}{3}}{\frac{2}{3}} = \frac{5}{2}$$

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

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

$$x^2 - 24x + 94 = 0 \Rightarrow \Delta = 576 - 376 = 200$$

$$\frac{24 \pm \sqrt{200}}{2} = 12 \pm 5\sqrt{2}$$

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

$$\frac{\sqrt{x-n} - 1 - (\sqrt{x-n} + 1)}{x-n-1} = \frac{1-n}{\sqrt{x-n}}$$

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

$$-2\sqrt{x-n} = (1-n)(\sqrt{x-n})$$

$$-2 = 1-n \Rightarrow n = 3$$

$$x^2 - 24x + 94 = 0 \Rightarrow \Delta = 576 - 376 = 200$$

$$\frac{-1 \pm \sqrt{1+144}}{1} = -1 \pm 12$$

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

$$9 - 14x = 14x^r \Rightarrow 14x^r + 14x - 9 = 0 \quad \Delta = 0^2 r^2 + 0^2 r = 4 \cdot 14^2 \xrightarrow{\text{discriminant}} \sqrt{14} \pm \sqrt{14}$$

$$\frac{-14 \pm \sqrt{14}}{2 \times 14} \rightarrow -\frac{1}{2} \Rightarrow -x^r + x + \frac{1}{14} \xrightarrow{\text{multiply by } x^r} 1 - x^r + 1 - x + \frac{1}{14} \rightarrow \frac{1 \pm \sqrt{80}}{14}$$

$$\frac{1 + \sqrt{80}}{14} + \frac{1 - \sqrt{80}}{14} + \frac{1}{2} = 1 + 1 = 2$$

$$\sqrt{x^r + \sqrt{-x^r + rx + 1}} + \sqrt{x^r + \sqrt{-x^r + 4x - 1}} = x + r$$

$$-x^r + rx + 1 \quad -x^r + 4x - 1$$

$$-(x^r - rx - 1)(x + 1) \rightarrow x = \pm \delta, x = r - \delta$$

$$-x^r + 4x - 1 \rightarrow \frac{r}{-1} = \frac{\epsilon}{1} \Rightarrow [r, \epsilon]$$

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

$$\begin{cases} y + u = 14 \\ y + rx = -1 \end{cases} \quad \begin{cases} y - rx = 1 \\ y + u = 14 \end{cases}$$

$$- \delta x = r, x = -\epsilon, y = u \rightarrow B$$

$$v u = 1 \epsilon, x = r, y = \delta \rightarrow A$$

$$AB = \sqrt{(4)^2 + (r)^2} = \sqrt{16 + \epsilon} = \sqrt{r} = r\sqrt{1}$$

$$y = \sqrt{x^r - rx + r} \rightarrow y = \sqrt{(x-r)^r} = |x-r|$$

$$\begin{cases} y - \frac{1}{r}x = r \\ y + u = r \end{cases} \quad \begin{cases} y - x = -r \\ -\frac{1}{r}x = -\epsilon \end{cases} \quad \begin{cases} y = -u + r \\ x = 1 \\ y = 4 \end{cases} A$$

$$\frac{|4+1-r|}{\sqrt{r}} = \frac{11\sqrt{r}}{r} = 4\sqrt{r}$$

$$BC = \sqrt{1} = \sqrt{r}, AC = 4\sqrt{r}$$

$$\frac{4\sqrt{r} \times \sqrt{r}}{r} = 12$$

$$\frac{1}{\epsilon} + \frac{1}{\epsilon + 9} = \frac{1}{r}$$

$$\frac{\epsilon + 9 + \epsilon}{\epsilon^2 + 9\epsilon} = \frac{1}{r} \rightarrow \frac{r\epsilon + 9}{\epsilon^2 + 9\epsilon} = \frac{1}{r}$$

$$r \cdot \epsilon + 14 = \epsilon^r + 9\epsilon$$

$$\epsilon^r - r(\epsilon + 14) = 0$$

$$(\epsilon - 0.4)(\epsilon + 8) = 0$$

$$\boxed{\epsilon = 0.4}$$

$$\epsilon = -8$$