

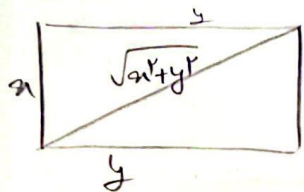
$$\begin{aligned} \text{مستطيل} = \varepsilon n &\rightarrow \frac{1+\sqrt{5}}{2} = \frac{\varepsilon n + 0}{\varepsilon n} \rightarrow \frac{1+\sqrt{5}}{2} = \frac{\varepsilon}{\varepsilon} + \frac{0}{\varepsilon n} \xrightarrow{\times \varepsilon} \\ \text{مستطيل} = \varepsilon n &\end{aligned}$$

ما هو المطلوب

$$r + r\sqrt{5} = \varepsilon + \frac{0}{n} \rightarrow r\sqrt{5} - r = \frac{0}{n} \rightarrow 0 = (r\sqrt{5} - r)n$$

-1

$$\frac{\text{مساحة المستطيل}}{\text{مساحة المثلث}} = \frac{\varepsilon n (r\sqrt{5} + r)n}{\varepsilon n \varepsilon n} \rightarrow \frac{(r\sqrt{5} + r)}{\varepsilon}$$



$$\frac{\sqrt{x^2 + y^2}}{\varepsilon n} = \frac{1 + \sqrt{5}}{2} \xrightarrow{\text{نضرب}} \frac{x^2 + y^2}{\varepsilon^2} = \frac{4 + r\sqrt{5}}{\varepsilon} = \frac{r + \sqrt{5}}{2}$$

-2

$$r^2 n^2 + r^2 y^2 = r^2 x^2 + r\sqrt{5} x^2 \rightarrow r y^2 = (1 + \sqrt{5}) x^2 \xrightarrow{\text{نضرب في 2}} \frac{1 + \sqrt{5}}{2}$$

$$ra + \sqrt{ra^2 + \varepsilon a} = r \rightarrow \sqrt{ra^2 + \varepsilon a} = r - ra \xrightarrow{\text{نربع}} ra^2 + \varepsilon a = r^2 a^2 - 2ra^2 + \varepsilon$$

-3

$$ra^2 - 14a + \varepsilon = 0 \xrightarrow{\text{نضرب}} a^2 - 14a + r = 0 \rightarrow (a^2 - 14a + 49) - 45 + r = 0 \rightarrow \frac{r}{45} = \frac{14}{45} \xrightarrow{\text{نضرب في 45}} r = 14$$

$$\frac{\frac{r}{v} + 1}{\frac{r}{v}} = \frac{\frac{9}{v}}{\frac{r}{v}} = \frac{9}{r} = \varepsilon/14$$

$$\frac{\sqrt{x+1}}{\sqrt{x-1} - r} - \frac{\sqrt{x+1}}{r - \sqrt{x-1}} = \frac{x-1}{\sqrt{x-1}} \xrightarrow{\text{نضرب في } \sqrt{x-1}} \frac{x-1}{\sqrt{x-1} - r} - \frac{\sqrt{x-1}}{r - \sqrt{x-1}} = \sqrt{x-1}$$

-4

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

$$10-n = -r\sqrt{x+1} \rightarrow x^2 - 10n + 100 = r^2 x + r^2 \rightarrow$$

$$10-n < 0 \rightarrow n > 10 \rightarrow x^2 - 2rx + 99 \rightarrow r^2 \pm \sqrt{4r^2 - 396} \rightarrow \frac{r^2 \pm \sqrt{144}}{2} \rightarrow \frac{r^2 \pm 12}{2}$$

① نضرب في 2

$$\frac{1}{\sqrt{r-n} + r} - \frac{1}{r - \sqrt{r-n}} = \frac{r-n}{\omega \sqrt{r-n}} \rightarrow \frac{r - r\sqrt{r-n} - \sqrt{r-n}}{\varepsilon - r + n = r+n} \rightarrow \frac{-r\sqrt{r-n}}{r+n} = \frac{r-n}{\omega \sqrt{r-n}}$$

$$-10(r-n) = (r-n)(r+n) \xrightarrow{-12} r+n = -10 \rightarrow n = -12$$

② نضرب في 2

مربع

$$\frac{1}{n^r} + \frac{1}{(1-n)^r} = \frac{140}{9} \rightarrow \frac{(1-n)^r + n^r}{(n^r)(1-n)^r} = \frac{140}{9} \rightarrow \frac{1 - r n + 1}{(n^r)(1-n)^r} = \frac{140}{9}$$

$$\frac{2}{n^r - n^r} = \frac{140}{9} \rightarrow \frac{2}{n^r - n^r} = \frac{140}{9}$$

$$\frac{1}{n^r} + \frac{1}{(1-n)^r} = \frac{140}{9} \rightarrow \frac{1}{n^r} + \frac{1}{(1-n)^r} = \frac{140}{9}$$

$$\sqrt{n} + \sqrt{-n^r + \varepsilon n^r + 10n - 100} + \sqrt{n^r \sqrt{-n^r + 4n - 1}} = n + r$$

$$-n(n^r - r) + \varepsilon(n^r - r) \sqrt{(n^r - r)(\varepsilon - n)} = \sqrt{n} + \sqrt{(n + \varepsilon)(n - \varepsilon)(\varepsilon - n)} + \sqrt{n^r + \sqrt{-(n^r - \varepsilon)(n - r)}}$$

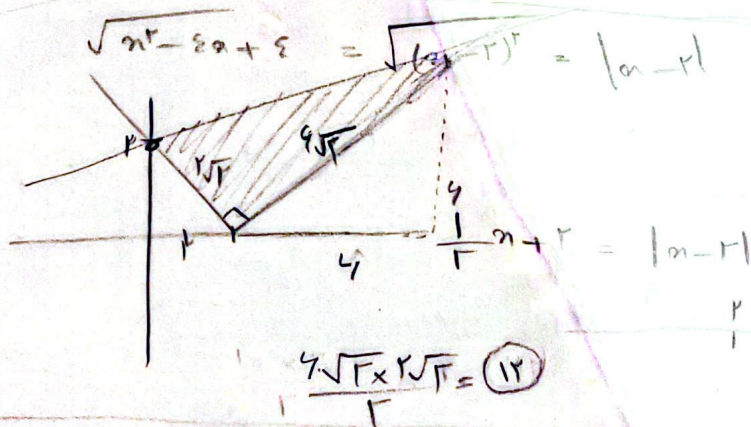
$$\frac{(n + \varepsilon)(n - \varepsilon)(\varepsilon - n)}{(n + \varepsilon)(n - \varepsilon)(\varepsilon - n)} \rightarrow \frac{1}{1} = 1$$

$$|n + r| + |n - 1| = \frac{-1}{r} n + \frac{14}{r} \rightarrow r|n + r| + r|n - 1| = -n + 14$$

$$r n + r^2 - r n + r = -n + 14 \rightarrow r n + r^2 - r n + r = -n + 14$$

$$r n + r^2 - r n + r = -n + 14 \rightarrow r n + r^2 - r n + r = -n + 14$$

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$$\frac{1}{t} + \frac{1}{t+9} = \frac{1}{r_0} \rightarrow \frac{t+9}{(t)(t+9)} = \frac{1}{r_0} \rightarrow t+9 = r_0$$

$$\varepsilon_0 + 110 = t^r + 9t \rightarrow t^r + 9t - 110 = 0 \rightarrow (t - 34)(t + 5) = 0 \rightarrow t = 34$$

$$t = -5 \text{ or } 34$$