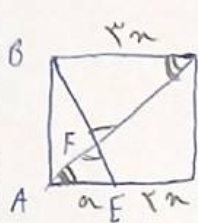


نام و نام



$$\xrightarrow{ii)} \triangle AFE \sim \triangle FBC \rightarrow \frac{AE}{BC} = \frac{AF}{CF} = \frac{FE}{BF} = \frac{1}{2}$$

$$AC = \frac{V}{\sqrt{f}} \rightarrow \frac{AF}{AC} = \frac{1}{f} \rightarrow \underline{AF = \frac{V \sqrt{f}}{f}}$$

$$BE = \sqrt{I_n} \rightarrow \frac{FE}{BE} = \frac{1}{r} \rightarrow FE = \frac{\sqrt{I_n}}{r} n$$

$$\frac{EF}{AF} = \frac{\frac{r\sqrt{4}}{2}u}{\frac{\sqrt{4}}{2}} =$$

جایا نوشتہ!

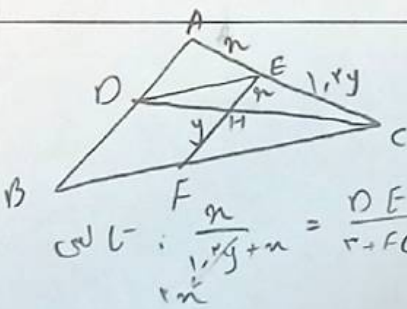
$$\sqrt{\frac{3}{2}}$$

$$\triangle AED \sim \triangle ACB \longrightarrow \frac{ED}{BC} = \frac{AD}{AB} = \frac{AE}{AC} \longrightarrow \frac{y}{n+1} = \frac{n}{12}$$

$$n^2 + n = 0 \rightarrow n^2 + n - 0 = 0 \rightarrow (n+0)(n-0) = 0 \rightarrow n = -0 \text{ و } 0$$

$n = 0$

✓

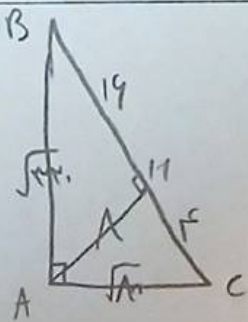


$$D\dot{H}E \sim F\dot{H}C \rightarrow \frac{DF}{FC} = \frac{HE}{HC} = \frac{DH}{HC} = \frac{1}{y} = \frac{1}{\Delta} \rightarrow$$

$$DE = \frac{2}{3} FC$$

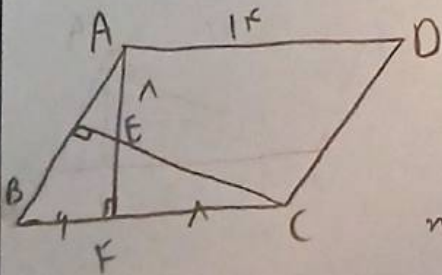
$$\text{sol } \frac{\frac{F}{r} + n}{\frac{1}{r} + n} = \frac{DE}{r+FC} \rightarrow \frac{x}{r+x} = \frac{\frac{n}{D} FC}{r+FC} \rightarrow r+FC = \frac{n}{D} FC \rightarrow \frac{n}{D} FC = r \Rightarrow \frac{n}{D} FC = r \Rightarrow \boxed{FC = \frac{D}{n} r}$$

$$BC = FC + BF = \frac{12}{r} + r = \frac{r^2 + 12}{r}$$



$$AH^* = CH \cdot BH \rightarrow \pi^* = 4 \times 14 \rightarrow n = 1$$

$$\frac{\sqrt{r_2}}{\sqrt{1_0}} = \sqrt{\frac{r_2}{1_0}} = \sqrt{r} = (r) \checkmark$$

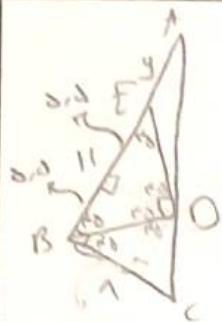


$$\left. \begin{array}{l} \hat{C} + \hat{B} = 90^\circ \\ \hat{B} + \hat{A} = 90^\circ \end{array} \right\} \rightarrow \hat{C} = \hat{A}, \hat{F} = \hat{A} \Rightarrow A\hat{B}F \sim E\hat{C}F$$

$$\frac{CE}{AB} = \frac{EF}{BF} = \frac{EC}{AF} \sim \frac{EF}{9} = \frac{1}{1+EF} \xrightarrow{EF=n} n + 1 = 10$$

$$n^r + 1/n - rA = 0 \rightarrow (n+1)(n-r) < 0 \rightarrow n > r \rightarrow EF = r^2$$

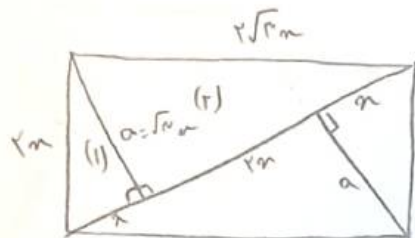
$$AF = 12 + 1 = 13 \quad \checkmark$$



$BDE \sim \dots$

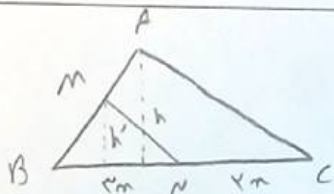
$$\frac{y + \Delta, \Delta}{11 + y} = \frac{\Delta, \Delta}{1} \rightarrow 1y + 11\Delta = \Delta + \Delta y \rightarrow y = 4,4$$

$$AE = 4,4 \quad \checkmark$$



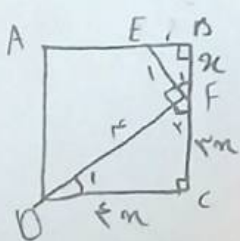
$$\frac{r}{a} = \frac{a}{r\sqrt{2}} \rightarrow a^2 = r^2 \sqrt{2} \rightarrow a = r\sqrt{2}$$

$$\frac{r\sqrt{2} \times r}{r\sqrt{2} \times r} = 1 \quad \checkmark$$



$$\frac{h}{h'} = \frac{r}{r'} \rightarrow \frac{h}{h'} = \frac{r}{r'} \rightarrow \frac{h}{h'} = \frac{r}{r'}$$

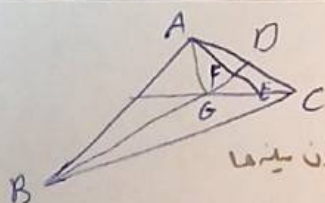
$$\frac{h}{h'} = \frac{r}{r'} \rightarrow \frac{h}{h'} = \frac{r}{r'} \rightarrow \frac{h}{h'} = \frac{r}{r'}$$



$$\hat{F}_1 + \hat{F}_2 = 90^\circ \rightarrow \hat{F}_1 = \hat{D}_1 \rightarrow EF \sim FD$$

$$\frac{EF}{FD} = \frac{EB}{FC} = \frac{BF}{CD} \rightarrow \frac{1}{f} = \frac{EB}{FC} = \frac{BF}{CD}$$

$$9r^2 + 14r^2 = 14 \rightarrow 23r^2 = 14 \rightarrow r = \frac{14}{23} \rightarrow \frac{r}{d} = \frac{14}{23} \quad \checkmark$$



$$\frac{BD}{FD} = ?$$

$$\frac{GD}{FD} = r \rightarrow \frac{GD}{FD} = r$$

$$\frac{BD}{GO} = r$$

$$\frac{BD}{FD} = \frac{BD}{GD} \times \frac{GD}{FD} \rightarrow r \times r = 1 \quad \checkmark$$