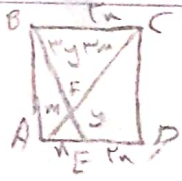


امیر محمد فروجی



$ED = \gamma AE$

$\frac{EF}{AF} = \gamma \quad \frac{EF}{DE} = \frac{\gamma}{\frac{AE}{\gamma}} = 1 \rightarrow EEF = DE AC = \sqrt{9m^2 + 4m^2} = \sqrt{13}m = \sqrt{13}u$

$F = \frac{FE}{DF} = k = m \quad FEF = \sin u \rightarrow EF = \frac{\sin u}{k}$

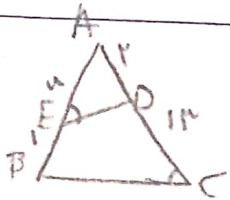
$BE = \sqrt{u^2 + u^2} = \sqrt{2}u = \sqrt{2}u$

$\frac{EF}{AF} = \frac{\frac{\sin u}{k}}{\frac{\sqrt{13}u}{2}} \rightarrow \frac{\sin u \times 2}{\sqrt{13}u \times k} = \frac{\sin u}{\sqrt{13}}$

$\frac{AF}{AC} = \frac{u}{\sqrt{13}} \rightarrow EAF = A$

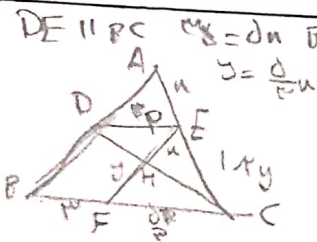
$AF = \frac{\sqrt{13}}{2}u$

$\sqrt{q} = \frac{\sqrt{8}}{2}u$



$$ABC \cong ADE \Rightarrow \frac{u}{10} = \frac{y}{u+1} \Rightarrow u^2 + u = 10 \Rightarrow u^2 + u - 10 = 0 \Rightarrow (u+5)(u-2) = 0$$

-5 2



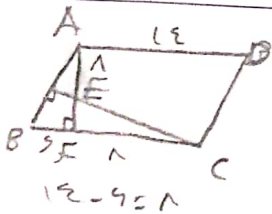
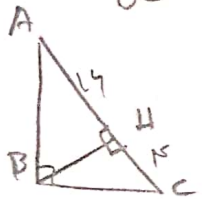
$$k = \frac{BC}{DE} = \frac{AC}{AE} = m$$

$$\frac{HC}{DH} = \frac{FH}{EH} = \frac{FC}{ED} \rightarrow \frac{FC}{ED} = \frac{d}{n} \rightarrow \frac{1}{n} = \frac{ED}{d \cdot ED + n} \quad \left. \begin{array}{l} \text{CF} = \frac{d}{n} \cdot ED \\ \text{ED} = \frac{d}{\frac{1}{n} - \frac{d}{n}} = \frac{1d}{1 - d} \end{array} \right\} \text{ED} = \frac{1}{\frac{1}{n} - \frac{d}{n}} = \frac{1d}{1 - d} = \frac{1d + n}{1 - d}$$

$$\frac{AB}{BC} = 2$$

$$A_0^2 = \cancel{A_0} \times \cancel{A_0} = \sqrt{\mu_0}$$

$$\frac{AB}{BC} = \frac{\sqrt{52}}{\sqrt{10}} = \sqrt{\frac{52}{10}} = \sqrt{\frac{26}{5}} = \sqrt{5.2} \approx 2.28$$

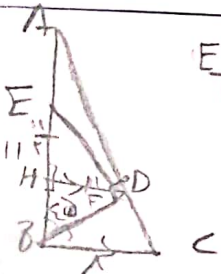


$$AE = 1 \quad BF = 4 \quad AD = 12 \quad AF = ?$$

$$ABF \cong FCE$$

$$\frac{EF}{BF} = \frac{CF}{AF} \Rightarrow \frac{EF}{5} = \frac{1}{1+EF} \Rightarrow 1EF + EF^2 = 5 \Rightarrow EF^2 + 1EF - 5 = 0$$

$$(E+1)(E-1)=0$$



$$\frac{ED}{11} = \frac{5}{5} \rightarrow ED = 11$$

$$\frac{HD}{BD} = \frac{\sqrt{2}}{2}$$

$$17_1 = \left(\frac{157}{7} \right)^2 + 60 \rightarrow 60 =$$

$$\frac{1-10}{11.5} = -0.87$$

$$A \neq D \approx \frac{1}{ABC} \rightarrow \frac{1 \times 11}{1 \times 5} = \frac{11}{5} = HD$$

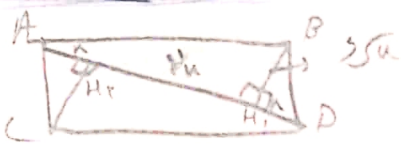
$$\frac{\frac{1}{f}}{\lambda} = \frac{AE + \frac{1}{f}}{AE + \frac{1}{f}}$$

$$\Delta AE - \frac{11}{5} AE$$

$$\frac{10}{\pi} AE = \frac{171}{\pi} - 32 \quad \leftarrow \frac{12}{\pi} AE - \frac{11}{\pi} AE$$

$$\frac{10}{7} AE = 14,28 \rightarrow 19,64$$

مساحت مثلث قائم



$$AB^2 = a^2 + b^2$$

$$BD^2 = BH^2 + DH^2$$

$$AB^2 = BH^2 + BD^2$$

$$16a^2$$

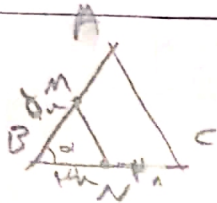
$$5\sqrt{a} \times \sqrt{a} \Rightarrow 5\sqrt{a^2} \quad \frac{5\sqrt{a^2}}{2}$$

$$BH^2 = \frac{a}{2} \times \frac{a \times \sqrt{a}}{2} \Rightarrow \frac{5a^2}{2}$$

$$BH^2 = \frac{a}{2} \times \frac{a}{2}$$

$$BH = \frac{a}{2}$$

$$BH^2 + a^2 = \left(\frac{a}{2}\right)^2 + a^2 = \frac{a^2}{4} + a^2 = \frac{5a^2}{4} = BH^2$$



$$BN = NC$$

$$S_{ABC} = S_{BMN}$$

$$BN = NC$$

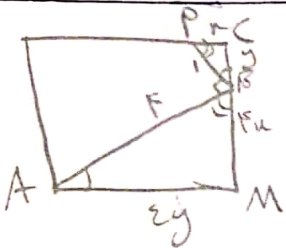
$$\frac{BM}{AM} = \frac{BN}{NC}$$

$$M = \frac{BM \times BN}{BN \times NC} = \frac{BM}{NC}$$

$$\frac{BM}{AM} = \frac{BM}{NC}$$

$$\frac{BM}{AM} = \frac{BM}{NC}$$

$$\frac{BM}{AM} = \frac{BM}{NC}$$



$$S = ?$$

$$ABM \cong BCP$$

$$F_H + y = \sqrt{y} \Rightarrow y = \sqrt{a} \Rightarrow a = \frac{y}{2}$$

$$k = \frac{AP}{PB} = \frac{AM}{BC}$$

$$S = \frac{1}{2} \times \frac{1}{2} \times \frac{1}{2} = \frac{1}{8}$$

$$\sqrt{y} \Rightarrow \frac{y}{2} = \frac{1}{2}$$

$$a = \frac{y}{2} = \frac{1}{2} \times \frac{1}{2} = \frac{1}{4}$$

$$a^2 + y^2 = 1$$

$$\left(\frac{y}{2}\right)^2 + y^2 = 1$$

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

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

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

$$GE = EC$$

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

$$AE \parallel GB$$



$$\frac{AC}{FD} = \frac{CE}{GE} = 1 \Rightarrow AC = FD, CE = GE$$