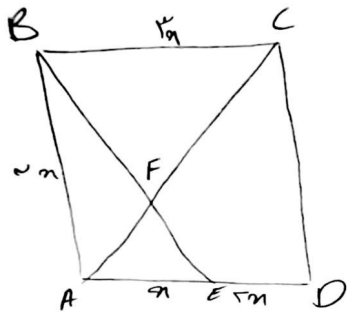




1- استاره ED در برابر AE و AF در برابر BC است. نسبت 3 و 1 است. $AEF \sim BCF$ دو مثلث

$$BE^2 = 2n^2 + 9n^2 = 10n^2 \rightarrow BE = \sqrt{10}n$$

$$BF = \frac{\sqrt{10}}{2}$$

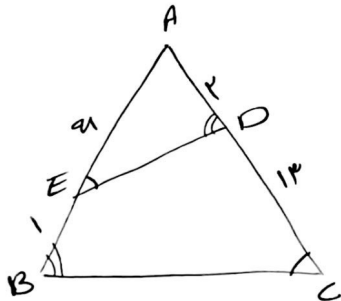
$$FE = \frac{\sqrt{10}}{2}$$

$$AC^2 = 7n^2 + 9n^2 = 16n^2 \rightarrow AC = \sqrt{16}n$$

$$AF = \frac{\sqrt{16}n}{2}$$

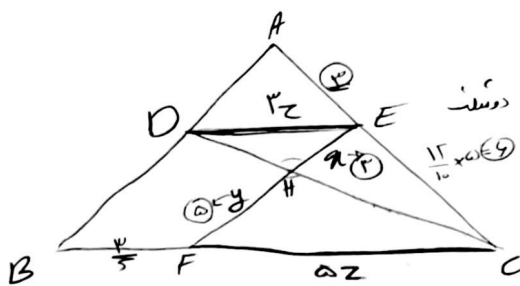
$$\frac{EF}{AF} = \frac{\frac{\sqrt{10}n}{2}}{\frac{\sqrt{16}n}{2}} = \frac{\sqrt{10}}{4}$$

مقدور است که
از هم متساوی



$ADE \sim ABC \rightarrow \frac{DE}{BC} = \frac{AD}{AB} \rightarrow \frac{6}{12} = \frac{AD}{10} \rightarrow AD = 5$

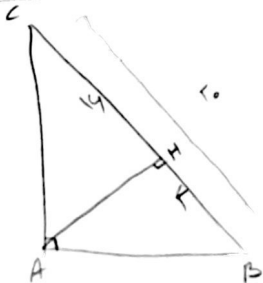
2- مقدار x؟



$DE \parallel BC$, $DE = 6$, $BF = 3$, $BC = ?$

$DE \parallel BC \rightarrow \triangle DEH \sim \triangle FCH \rightarrow \frac{DE}{FC} = \frac{DH}{FH}$

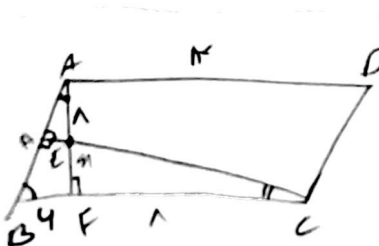
$DE \parallel BC \rightarrow \frac{DE}{BC} = \frac{AD}{AB} \rightarrow \frac{6}{BC} = \frac{5}{10} \rightarrow BC = 12$



$AC^2 = CH \times CB \rightarrow AC^2 = 14 \times 5 \rightarrow AC = \sqrt{70}$

$AB^2 = BH \times CB \rightarrow 4 \times 5 = 20 \rightarrow AB = \sqrt{20}$

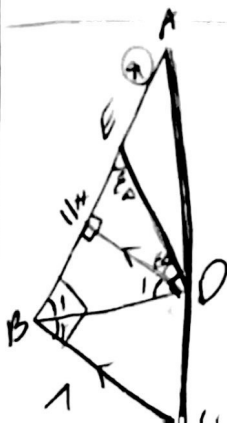
$CB = 10$



$\triangle AFB \sim \triangle CFE \rightarrow \frac{AF}{CF} = \frac{AB}{CD} \rightarrow \frac{AF}{8} = \frac{10}{12} \rightarrow AF = \frac{20}{3}$

$AF + 12 = 10 \rightarrow (n+12)(n-10) \rightarrow n = -2$

$AF = 10 + n = 8$



$DH \parallel BC \rightarrow \hat{A} = \hat{B}_1 \rightarrow \hat{B}_1 = \hat{B}_1 \rightarrow \hat{P}_1 = \hat{B}_1 = 90^\circ \rightarrow \triangle ABC \sim \triangle P_1$

$DH \parallel BC \rightarrow BH = EH = 6$

$DH = 6$

$\frac{AH}{AB} = \frac{DH}{BC} \rightarrow \frac{AH}{10} = \frac{6}{12} \rightarrow AH = 5$

$AB = 10$

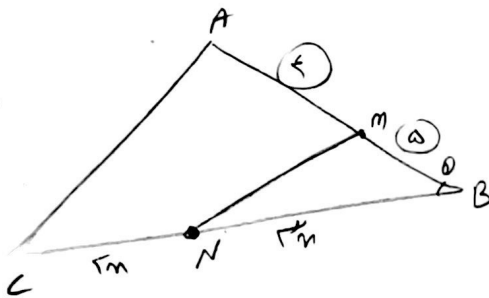
$BC = 12$

$AC = 14$

$n = 4$

$$\sqrt{(\Gamma_n)} (\Gamma_n) = \Gamma_n \Gamma_n = \Gamma_n$$

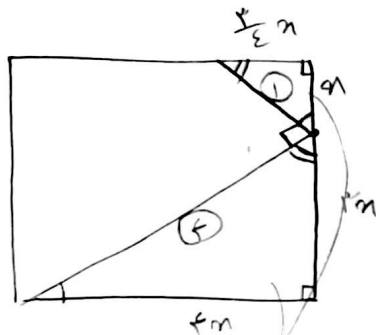
$$\frac{\text{مساحت مربع}}{\text{مساحت مربع}} = \frac{\sqrt{n} \times \sqrt{n}}{n \times \sqrt{n} \times \frac{1}{\sqrt{n}}} = \textcircled{1}$$



$$\frac{S_{ABC}}{S_{BMN}} = \frac{AB \times \cancel{BC} \times \cancel{\frac{1}{2}} \times \sin \theta}{BM \times \cancel{MN} \times \cancel{\frac{1}{2}} \times \sin \theta} = \frac{\mu}{1}$$

$$\frac{AB}{BM} = \frac{1}{\omega}$$

$$\rightarrow \boxed{\frac{B_m}{A_m} = \frac{\omega}{\varepsilon}}$$

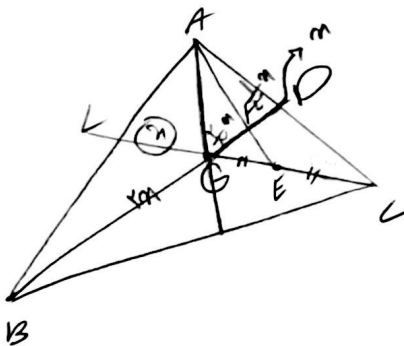


$$9n^r + 14n^r = 14 \rightarrow 7n^r = 14$$

$$\omega n = f \rightarrow n = \frac{f}{\omega}$$

$$r = \left(\frac{c}{\omega} \times r \right)^T = \left(\frac{14}{\omega} \right)^T = \frac{\sqrt{24}}{\sqrt{\omega}}$$

آملت مایه اند (۲ روزه بر آب)



$$\frac{BD}{FD}$$

$G \rightarrow BD, CL \rightarrow$ مسئله

[illegible]

$$\frac{100}{FP} = \frac{100}{\frac{1}{2} \times 2} = 9$$