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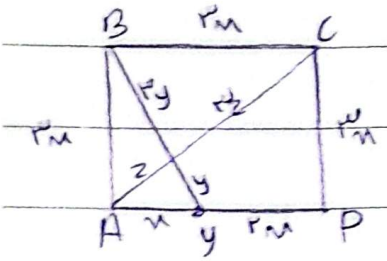

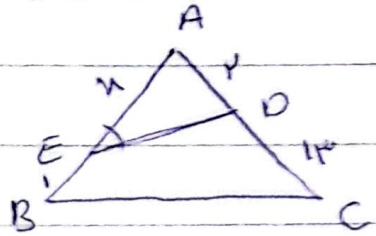

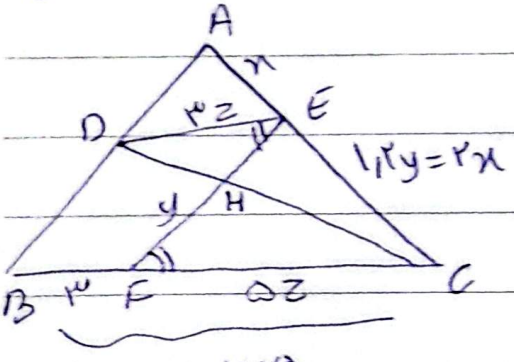

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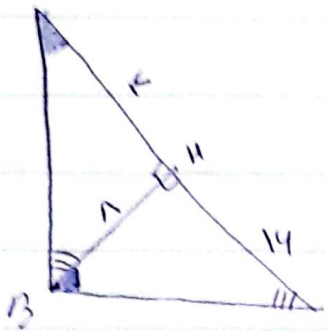
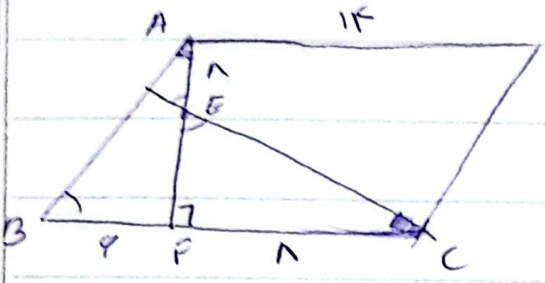


$AH \times CH = BH^2 \rightarrow ۴ \times ۱۴ = ۸^2$.۴

$\frac{BC}{AB} = \frac{HC}{HB} = \frac{۱۴}{۸} = ۲$



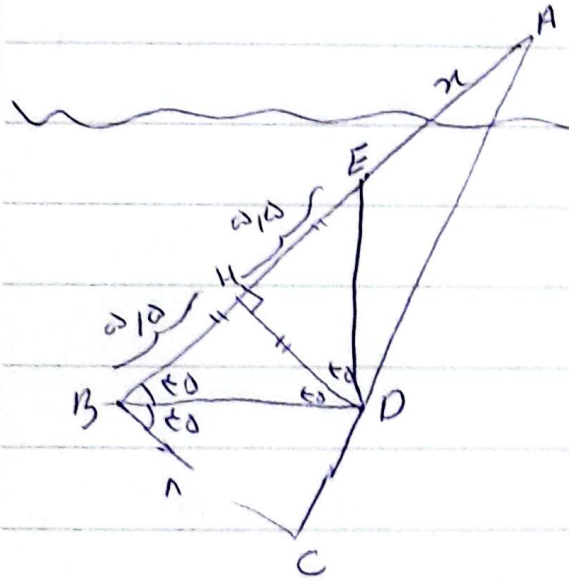
$\hat{AFB}, \hat{EFC} =$.۵

$\frac{EC}{AF} = \frac{EF}{BF} = \frac{۸}{EFB+۸} = \frac{EF}{۴}$

$۱۲۸ = FE^2 + ۸FE \rightarrow FE^2 + ۸FE - ۱۲۸$

$(FE+۱۷)(FE-۴) \rightarrow FE = ۴$

$FE + AE = AF = ۱۲$

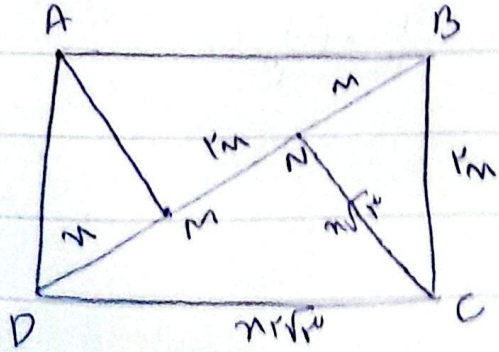


$\frac{EH}{BH} = ۱$ $EH = BH = \frac{۱۱}{۲} = ۵/۵$.۶

$\frac{x + ۵/۵}{x + ۱۱} = \frac{۵/۵}{۸}$

$۸x + ۴۴ = ۹۵x + ۴/۵$

$۱۴/۵ = ۲/۵x \rightarrow x = ۴/۴$



$NBC, DBC \rightarrow \frac{Bc}{DB} = \frac{NB}{Bc}$.۷

$\begin{cases} ۱۴x^2 = ۴M^2 + m^2 \rightarrow Dc = m\sqrt{۶} \\ (Bc)^2 = ۴M^2 \rightarrow Bc^2 = ۱۲m \end{cases}$

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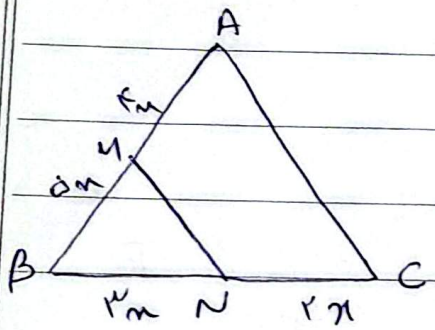
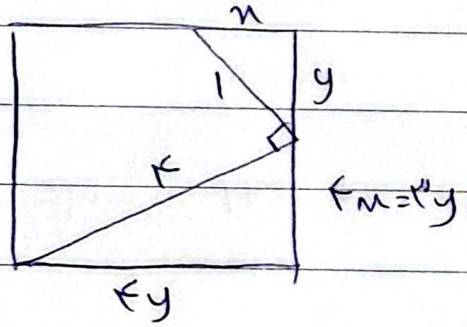
$$\frac{\frac{\sqrt{3}\,n \times n}{2}}{4n^2\sqrt{3}} = \frac{\frac{n^2\sqrt{3}}{2}}{4\sqrt{3}n^2} = \frac{1}{8} \qquad \frac{\text{مساحة}}{\text{مساحة}} = 8$$



$$\frac{BN \times BM \times \frac{1}{2} \times \sin 120^\circ}{BC \times AB \times \frac{1}{2} \times \sin B} \quad .8$$

$$\frac{BM \times 3m}{5x \times AB} = \frac{1}{3} \rightarrow \frac{BM}{AB} = \frac{5}{9}$$

$$\frac{BM}{AM} = \frac{5}{3}$$

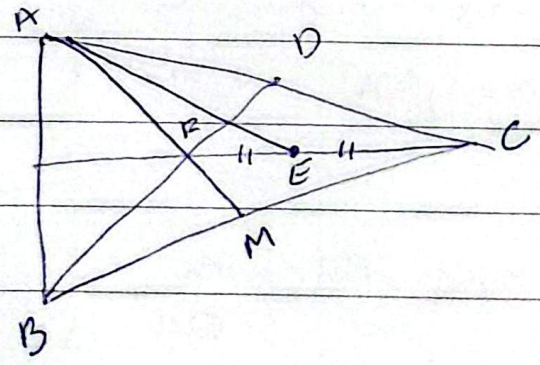


$$4y = 4M + y \rightarrow 3y = 4M \quad .9$$

$$\sqrt{9y^2 + 16y^2} = 5y = 4$$

$$y = \frac{4}{5}$$

$$\left(4 \times \frac{4}{5}\right)^2 = \frac{16y}{25}$$



$$AG = 2GM = \frac{2}{3}AM \quad 10.$$

$$BD = 2GP$$

$$FB = \frac{1}{3}GD$$

$$FD = \frac{1}{3} \times \left(\frac{1}{3}BD\right) = \frac{BD}{FD} = 9$$