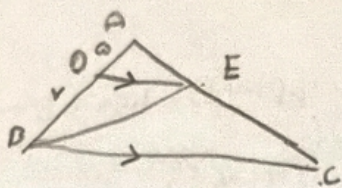
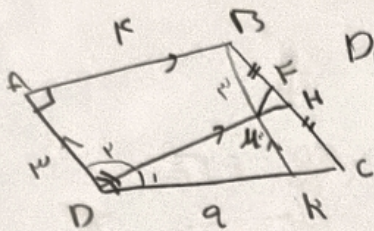


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(۲۲) شهرزاد شمس

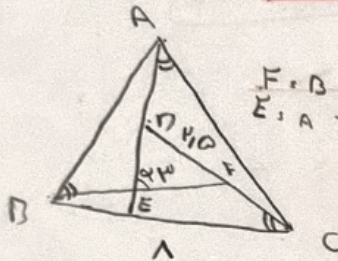


ارتفاع برابر دارند $\rightarrow \frac{S_{BCE}}{S_{BDE}} = \frac{BC}{DE} \rightarrow \frac{6}{12} = \frac{DE}{BC} \rightarrow \boxed{\frac{12}{6}}$

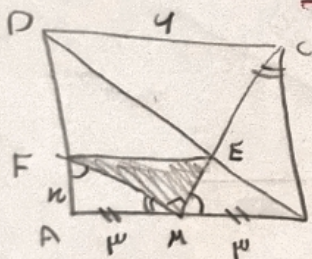


$D_1, D_2 \rightarrow BDM \cong DMF$

$BMH \sim BKC \rightarrow \frac{9}{12} = \frac{BK}{BM} \rightarrow \frac{BK}{BM} = \frac{12}{9} \rightarrow \frac{HK}{MN} = \frac{F}{K} \rightarrow \boxed{12}$



F, D
 $E, A \rightarrow \triangle ABC \sim \triangle DEF \rightarrow \frac{BC}{DF} = \frac{AB}{EF} \rightarrow \frac{1}{1/2} = \frac{AB}{\frac{AB}{2}} \rightarrow \boxed{2, 4}$



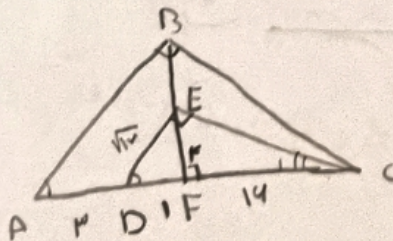
$DCE \sim MBE \rightarrow 12^2 + 4^2 = x^2 \rightarrow \sqrt{160} = 4\sqrt{10}$

$4 \text{ ممتوسط} \rightarrow \frac{12\sqrt{10}}{3} = \sqrt{10} \rightarrow \boxed{EM = \sqrt{10}}$

$CBM \sim MAF \rightarrow \frac{4}{3} = \frac{12}{k} \rightarrow k = \frac{12}{3} \rightarrow FM = \frac{12}{3}$

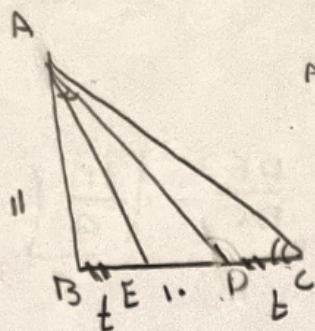
$\frac{EM \times FM}{r} = \frac{\frac{12\sqrt{10}}{3} \times \sqrt{10}}{r} = \frac{160}{r}$

$\frac{9}{2} + 2 = \frac{x^2}{2} \rightarrow \sqrt{\frac{x^2}{2}} = \frac{12\sqrt{10}}{3} \Rightarrow FM$



$11 \neq 1, \sqrt{11}$

$14 = DE \times FC \rightarrow FC = 14 \rightarrow BC^2 = 14 \times 10 \rightarrow BC = 1\sqrt{14}$

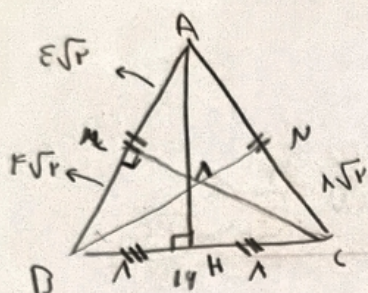


$$\triangle ADE \sim \triangle AEC$$

$$\frac{AE}{CE} \cdot \frac{ED}{AE} \rightarrow AE', ED \times CE \rightarrow 1 \cdot (1+t) = 1 + 1 \cdot t$$

$$AE^r = AB^r + EB^r \rightarrow 11^r + 1^r$$

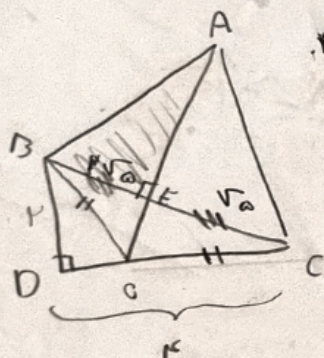
$$E^r + rI = 1 \cdot E_s \cdot (E - r)(E_v) \quad E^r \quad E_s \quad E_v \quad DC, v \quad (v)$$



AD, $4\epsilon + 4\epsilon$, AB, $\sqrt{r}$ $\rightarrow$ AM, MB, $\epsilon\sqrt{r}$

$$(1\sqrt{r})^r + (2\sqrt{r})^r = 45 \times r + 14 \times r = 14. \quad \boxed{CM, r\sqrt{r}}$$

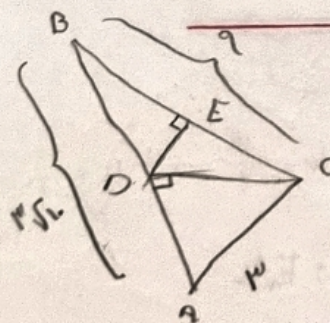
$CM = BM$



$$F + W \leq Y \rightarrow BE \cdot \sqrt{2} \rightarrow BE \cdot \sqrt{2} \rightarrow AE \cdot \sqrt{2}$$

$S_{ADE} = \frac{1}{V} \times A_E \times D_E, \frac{1}{V} \times \sqrt{A} \times \sqrt{W} \times \omega, \omega \rightarrow A_E$

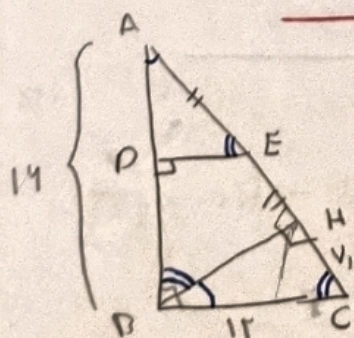
$$19 + \epsilon \cdot k = BC \cdot \sqrt{a} \rightarrow BL \cdot \sqrt{a}$$



$$11+9, 9. \rightarrow \sqrt{9}, 11\sqrt{1}$$

$$AD \times \sqrt{1.1} \rightarrow AD \times \frac{1}{\sqrt{1.1}} = \frac{10}{\sqrt{1.1}} = \frac{10 \sqrt{1.1}}{1.1}$$

$$\frac{AE}{r} = \frac{KV \sqrt{I_c}}{I_c} \rightarrow \frac{BE}{r} = \frac{KV}{I_c} \rightarrow BE \sqrt{A/I}$$



$$\frac{k}{14} = \underline{\hspace{2cm}}$$

$$AC, 14^P + 1P^P = P.$$

$$1r^H = CH_3Br \rightarrow CH_3, 1r^H$$

$$\frac{P_1 - P_2}{P_1} = 9,8 \rightarrow AE, EH = 9,8$$

$$\frac{4}{3} \epsilon \cdot \frac{p_F}{1r} \rightarrow p_F = \left(\frac{1}{18} \right)$$