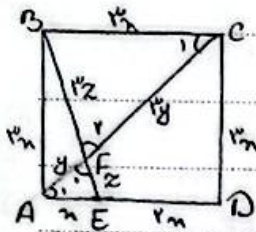


19, 5

الصفحة 19 من 20

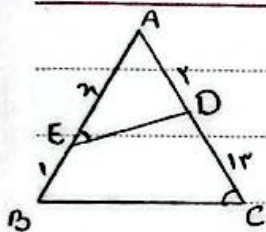
1/5



$$\left. \begin{array}{l} \text{بما أن } \angle F = \angle E \\ BC \parallel AC \\ AC \parallel \rightarrow \hat{A} = \hat{C} \end{array} \right\} \Rightarrow \triangle AEF \sim \triangle CBF \Rightarrow \frac{AE}{BC} = \frac{AF}{CF} = \frac{EF}{BF} = \frac{1}{2}$$

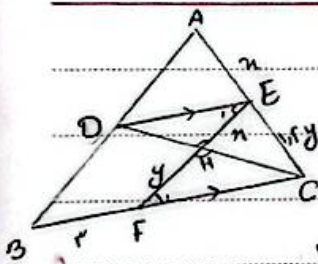
$$\Rightarrow CF = 2AF, \quad BE = 2EF$$

$$\begin{aligned} \triangle ABD: (12)^2 + (12)^2 &= (12)^2 \rightarrow 2 \cdot 12^2 = 12^2 \rightarrow 12 = \frac{12}{2} \cdot 2 \\ \triangle ABE: x^2 + (12)^2 &= (12)^2 \rightarrow \sqrt{10} \cdot x = 12 \rightarrow x = \frac{12}{\sqrt{10}} \end{aligned}$$



$$\left. \begin{array}{l} \hat{E} = \hat{C} \\ \hat{A} = \hat{A} \end{array} \right\} \Rightarrow \triangle AED \sim \triangle ACB \Rightarrow \frac{AE}{AC} = \frac{AD}{AB} = \frac{ED}{BC}$$

$$\Rightarrow \frac{12}{12} = \frac{x}{12} \Rightarrow 12 \cdot 12 = x(12) \rightarrow x = 12$$

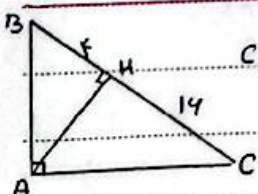


$$\left. \begin{array}{l} ED \parallel BC \rightarrow \hat{E} = \hat{F} \\ EF \parallel \end{array} \right\} \Rightarrow \triangle HED \sim \triangle HFC \Rightarrow \frac{HE}{HF} = \frac{HD}{HC} = \frac{ED}{FC}$$

$$\begin{aligned} 12y = 2x \rightarrow x = 6y \\ \Rightarrow \frac{ED}{FC} = \frac{6y}{8} = 0.75 \rightarrow DE = 0.75FC \end{aligned}$$

$$ED \parallel BC \Rightarrow \triangle ABC \sim \triangle ADE \Rightarrow \frac{AE}{AC} = \frac{DE}{BC} \Rightarrow \frac{0.75y}{0.75y + 1.25y} = \frac{DE}{BC} \Rightarrow \frac{0.75FC}{BC} = \frac{1}{2} \Rightarrow BC = 1.5FC$$

$$\Rightarrow BC = 12 + FC = 1.5FC \Rightarrow \frac{1}{2}FC = 12 \Rightarrow FC = 24 \Rightarrow BC = 12 + 24 = 36$$



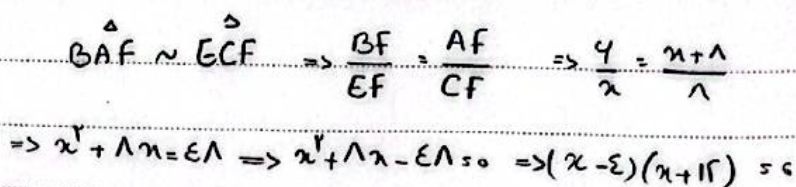
$$CH = 14 - 14 = 0$$

$$\frac{AC}{AB} = \frac{14 \times 14}{14 \times 14} = 1 = 1$$

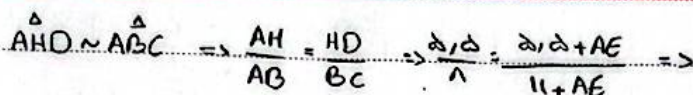
$$AB = BH \times BC$$

$$AC = CH \times BC$$

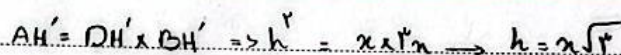
PAPCO



$$x = k \rightarrow Af = |x|$$

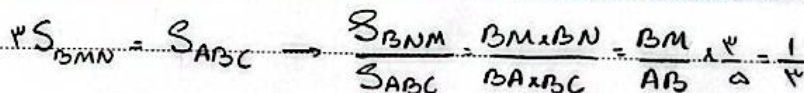


$$T_F + \Delta AE = \Delta, \Delta AE + 40, \Delta \rightarrow 7, \Delta AE = 4, \Delta \Rightarrow AE = 4,41$$

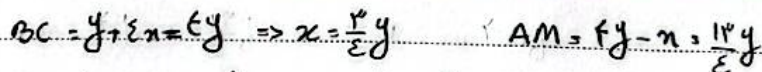


$$S_{ABCD} = S_{ABD} + S_{BCD} = 2 \cdot S_{ABD} = 2 \times \frac{1}{2} \times \sqrt{6} \times 4\sqrt{6} = 4\sqrt{6} \text{ m}^2$$

$$S_{BHC} = S_{ADH} = \frac{h \times x}{r} = \frac{\sqrt{r}^2}{r} \Rightarrow \frac{S_{ABCD}}{S_{BHC}} = \frac{\sqrt{r}^2}{\frac{\sqrt{r}^2}{r}} = \underline{1}$$



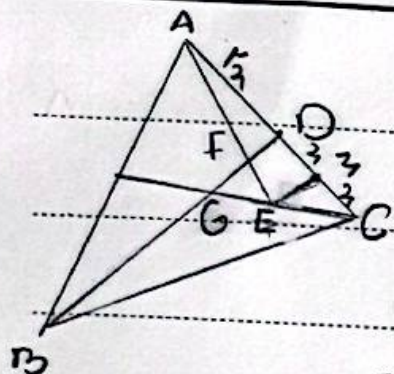
$$\Rightarrow \frac{BM}{AB} = \frac{\alpha}{1} \Rightarrow \frac{BM}{AM} = \frac{\alpha}{\epsilon} = \underline{1,52}$$



$$\left. \begin{aligned} q_0 + \hat{M}_1 &= q_0 + \hat{N}_1 \Rightarrow \hat{M}_1 = \hat{N}_1 \\ q'_1 &= \hat{B} = \hat{C} \end{aligned} \right\} \rightarrow \overset{\Delta}{M}_{BN} \sim \overset{\Delta}{D}_{CN}$$

$$\Rightarrow \frac{M_N}{D_N} = \frac{M_B}{N_C} = \frac{B_N}{D_C} = \frac{1}{\varepsilon} \Rightarrow IV = \left(\frac{1}{\varepsilon} y\right)^2 + (\varepsilon y^2) \rightarrow y = 0.11$$

$$CD = t_{x,0}, 1 = 1,5 \rightarrow S = 1,5 \times 1,5 = 10,125$$



$$EM \parallel GD \rightarrow \frac{EC}{EG} = \frac{CM}{DM} = 1 \Rightarrow CM = DM \quad \text{midpoint } M \text{ of } EC \quad -10$$

$$FD \parallel EM \rightarrow \frac{AD}{AM} = \frac{FD}{EM} = \frac{1}{\gamma} \Rightarrow EM = \gamma FD$$

$$EM \parallel PG \rightarrow \frac{CM}{CD} = \frac{EM}{GD} = \frac{1}{\gamma} \Rightarrow GD = \gamma EM = \gamma \times \gamma FD = \gamma^2 FD$$

$$\frac{GD}{BD} = \frac{1}{\gamma} \Rightarrow \frac{\gamma^2 FD}{BD} = \frac{1}{\gamma} \Rightarrow \frac{BD}{FD} = \underline{9}$$

3)