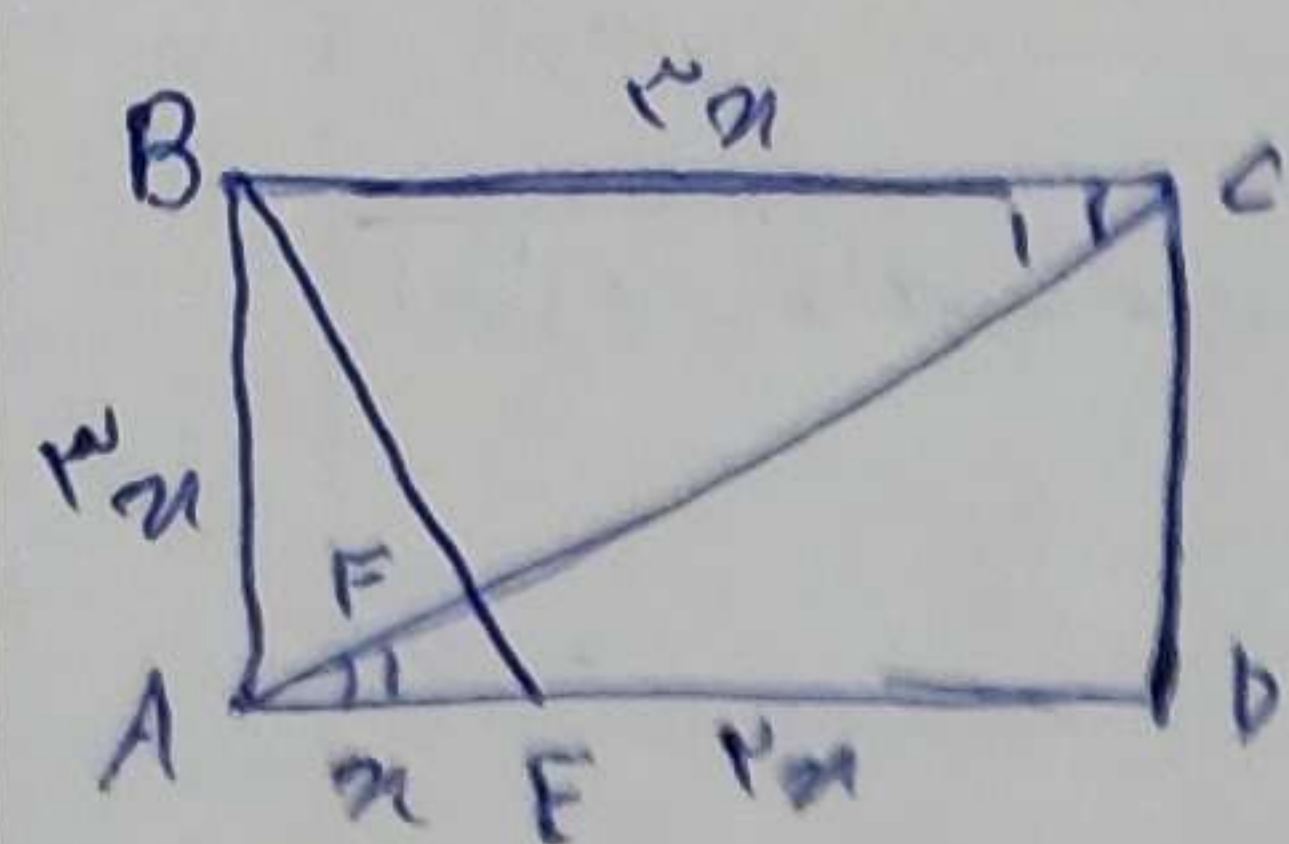




$$\left. \begin{array}{l} \overline{BC} \parallel \overline{AD} \Rightarrow \hat{A}_1 = \hat{C}_1 \\ \overline{AC} \\ F_1 = F_1 \end{array} \right\} \therefore \triangle BCF \cong \triangle EAF$$

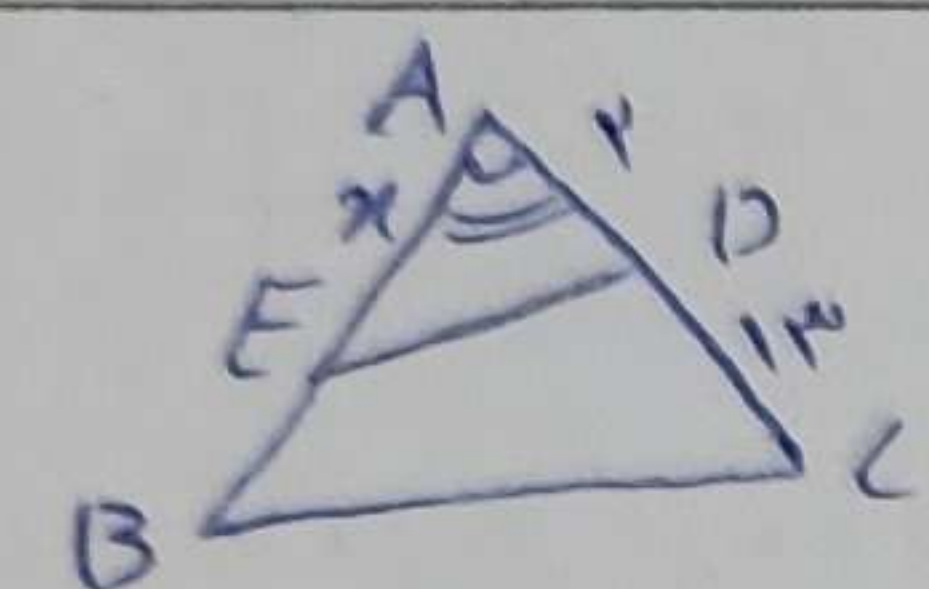
$$\frac{BC}{AE} = \frac{10}{21} = 3 \rightarrow 30$$

$$\overline{BE} = \sqrt{(30)^2 + 21^2} = \sqrt{1021}$$

$$\overline{EF} \in \overline{BC}, \frac{1}{3} \overline{BC} = \overline{EF} \rightarrow \overline{EF} = \frac{\sqrt{1021}}{3}$$

$$\overline{AC} = \sqrt{(30)^2 + (30)^2} = 30\sqrt{2}$$

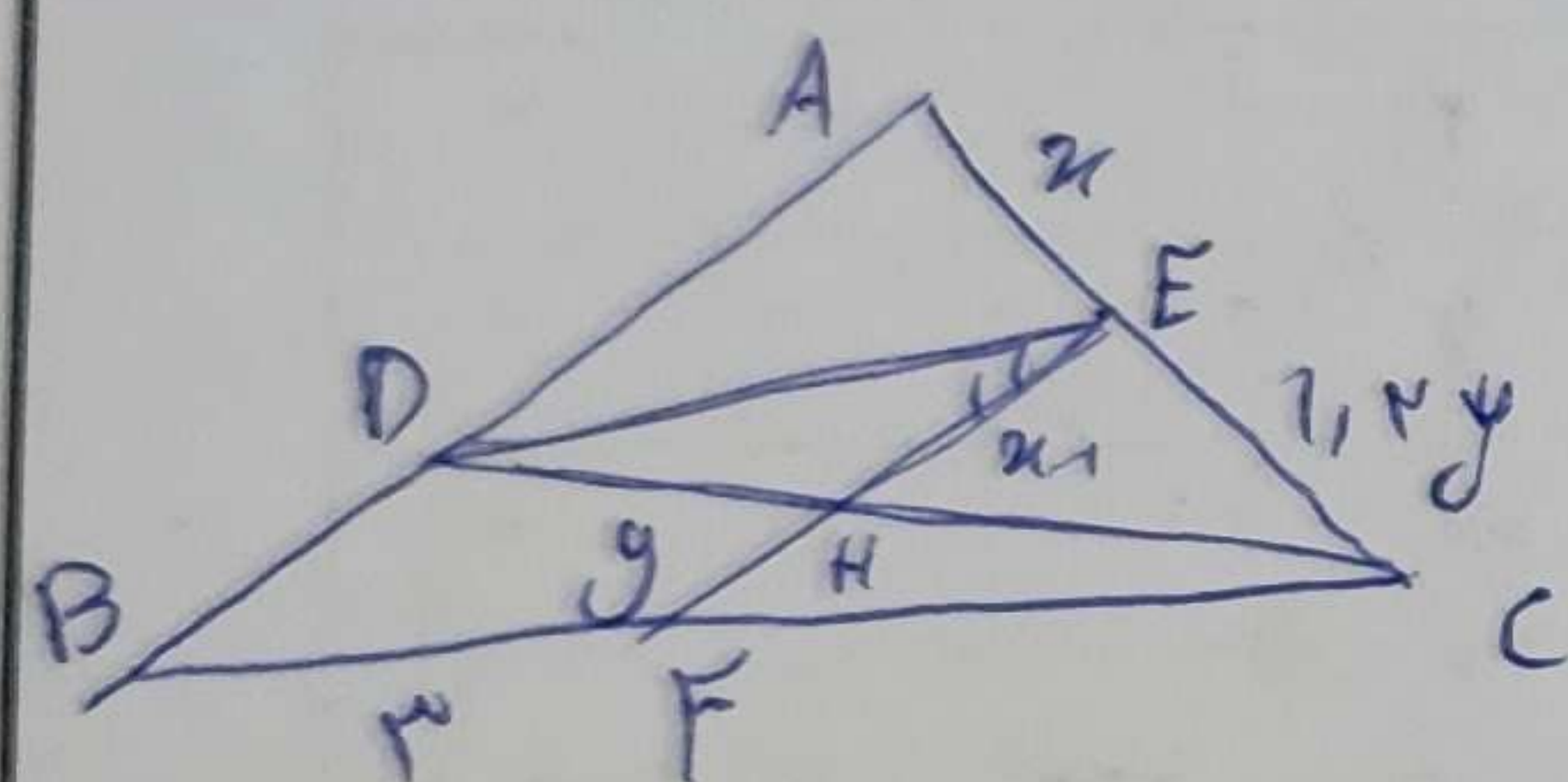
$$\overline{AF} \in \overline{AC}, \frac{1}{3} \overline{AC} = \overline{AF} \rightarrow \overline{AF} = \frac{30\sqrt{2}}{3} = 10\sqrt{2}$$



$$\left. \begin{array}{l} \triangle AED \cong \triangle AEB \\ \hat{A} \text{ مشترک} \end{array} \right\} \therefore \frac{AE}{AC} = \frac{AD}{AB}$$

$$\Rightarrow \frac{21}{10} = \frac{2}{21+1} \Rightarrow 21^2 + 21 - 2 = 0 \Rightarrow 21 = 0 \checkmark$$

$$21 = -4$$



$$\left. \begin{array}{l} 21y = 10x \\ H_1 \neq H_1 \\ E_1 = F_1 \end{array} \right\} \therefore \triangle HDE \sim \triangle HFC$$

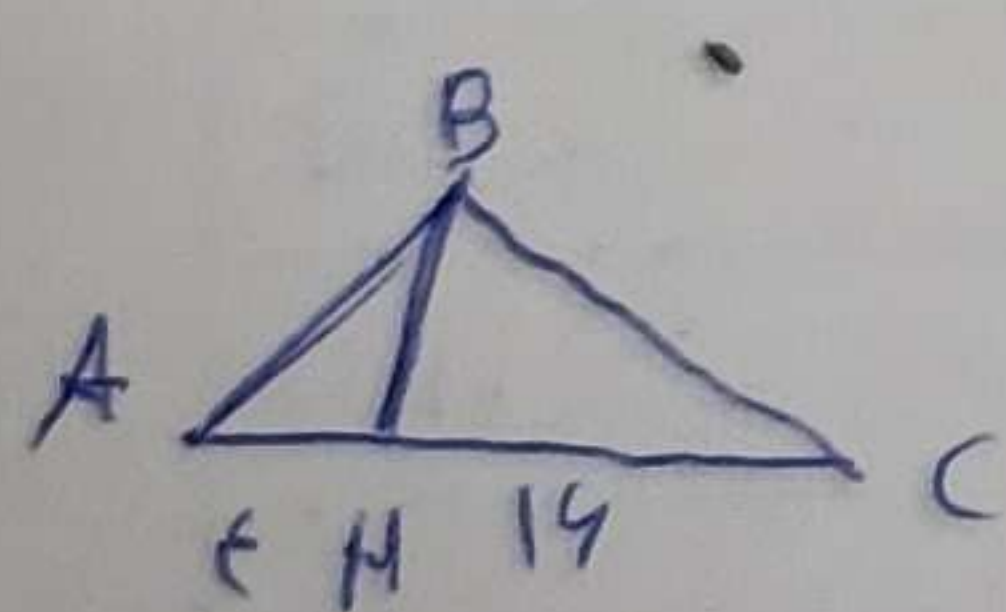
$$\overline{DE} \parallel \overline{BC} \rightarrow \frac{DE}{BC} = \frac{AD}{AB} = \frac{AE}{AC}$$

$$\frac{10}{21} = \frac{DE}{CF} \rightarrow 21$$

$$\begin{aligned} 21y &= 10x \\ 11y &= \frac{10x}{21} \times \frac{21}{10} \\ 11y &= 21 \end{aligned}$$

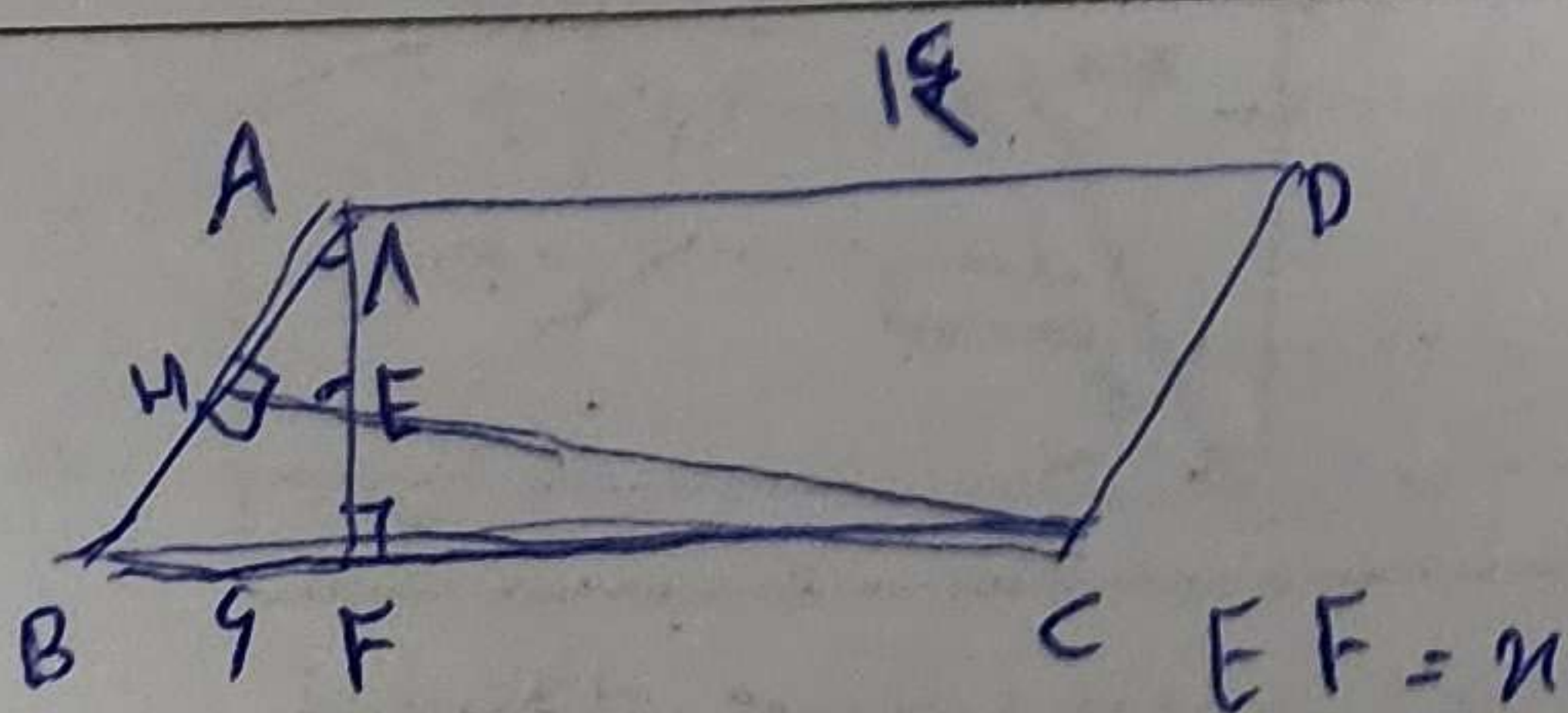
$$\frac{21z}{10z+21} = \frac{21}{11y+21} \Rightarrow \frac{21z}{10z+21} = \frac{21}{21}$$

$$BC = 21 + 10z = \frac{10V}{F}$$



$$AB^2 = AH \times AC \Rightarrow AB = 10\sqrt{2}$$

$$BC^2 = CH \times AC \Rightarrow BC = 10\sqrt{2}$$



$$\left. \begin{array}{l} E_1 = F_1 \\ 90^\circ = H_1 = F_1 \end{array} \right\} \therefore \triangle AHE \sim \triangle FEC$$

$$EF = 10$$

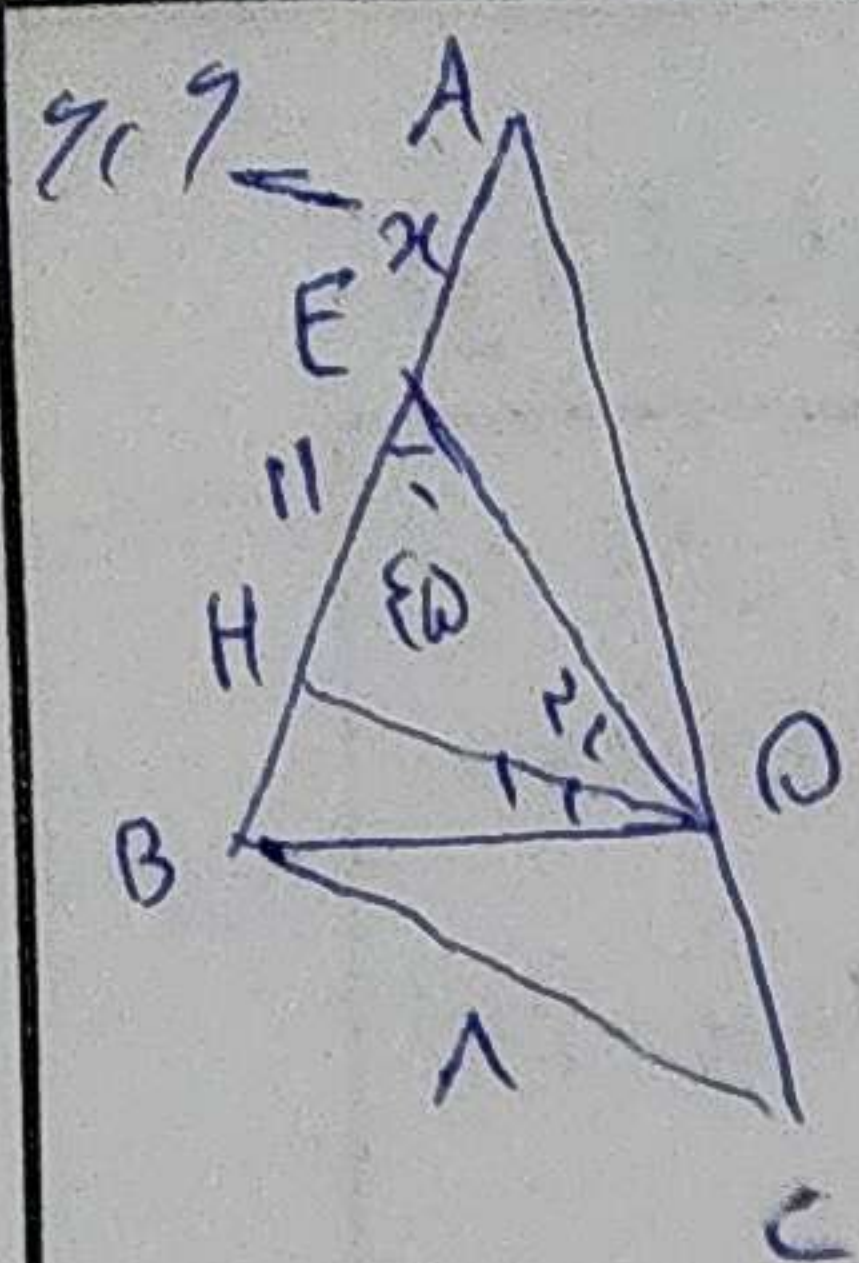
$$AF = 1 + 9 = 10$$

$$\left. \begin{array}{l} A_1 = C_1 \\ F_1 = F_1 = 90^\circ \end{array} \right\} \therefore \triangle ABF \cong \triangle FEC$$

$$21 + 10x = 10 \Rightarrow$$

$$\frac{AB}{CE} = \frac{BF}{FE} = \frac{AF}{FC} \Rightarrow \frac{10}{21} = \frac{10}{21}$$

$$-10 \rightarrow 10$$



$$B_1 = B_2$$

$$DH \parallel BC \rightarrow \angle P = \angle_1$$

$$B_1 + D_1 = 90$$

$$B_1 + B_2 = 9$$

$$\left\{ \begin{array}{l} B_1 = B_2 \\ B_1 = B_2 = D_1 = F_W \end{array} \right.$$

$$H_D^P = \sqrt{(\omega/\omega)^P} = \omega/\omega$$

$$B_1 + F_1 = 9.$$

$$\epsilon \omega + E_1 = 9,$$

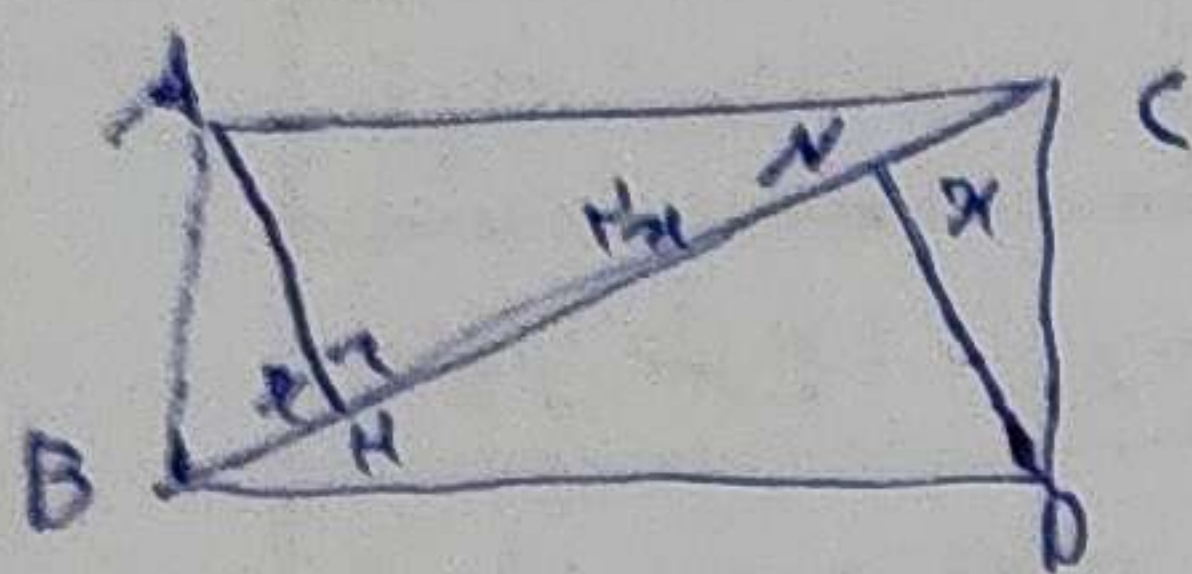
$$\downarrow$$

$$E\omega$$

$$\left. \begin{aligned} E_1 &= B_1 \rightarrow BD = ED \\ D &= 90^\circ \end{aligned} \right\} EH = BH$$

$$DH \parallel BC \rightarrow \frac{DH}{BC} = \frac{AH}{AB} \Rightarrow \frac{\omega/\omega}{1} = \frac{n+\omega/\omega}{n+11} \Rightarrow \omega/\omega n + 9/\omega = 1n+11$$

$$n = 9,9$$



$$ABC \rightarrow AH^P = BH \times BC$$

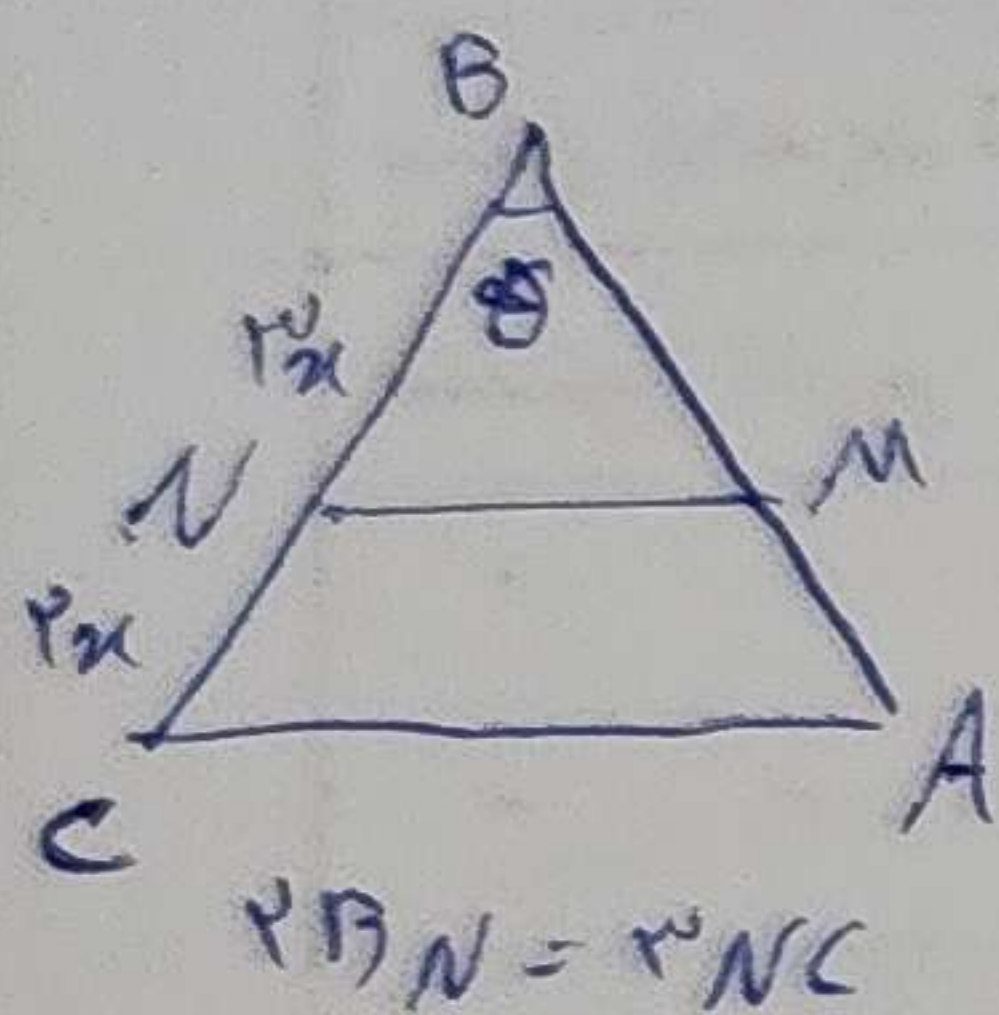
$$AH^p = n \times H_n$$

$$AH = \sqrt{2}n$$

$$S \rightarrow ABCSP = F\sqrt{n}n^p$$

$$\triangle NCD \sim \triangle ABH \Rightarrow \frac{\sqrt{2}x}{y} = \frac{\sqrt{2}x'}{y'}$$

$$\frac{\text{مقياس}}{\text{م. ا. ب. ح.}} = \frac{4 \sqrt{2} \text{ م.}}{\frac{\sqrt{2} \text{ م.}}{2}} = 1$$



$$\frac{S_{ABC}}{S_{ANM}} = \frac{\frac{1}{2} \sin A BC \times AB}{\frac{1}{2} \sin A BN \times BM} = \frac{r}{R}$$

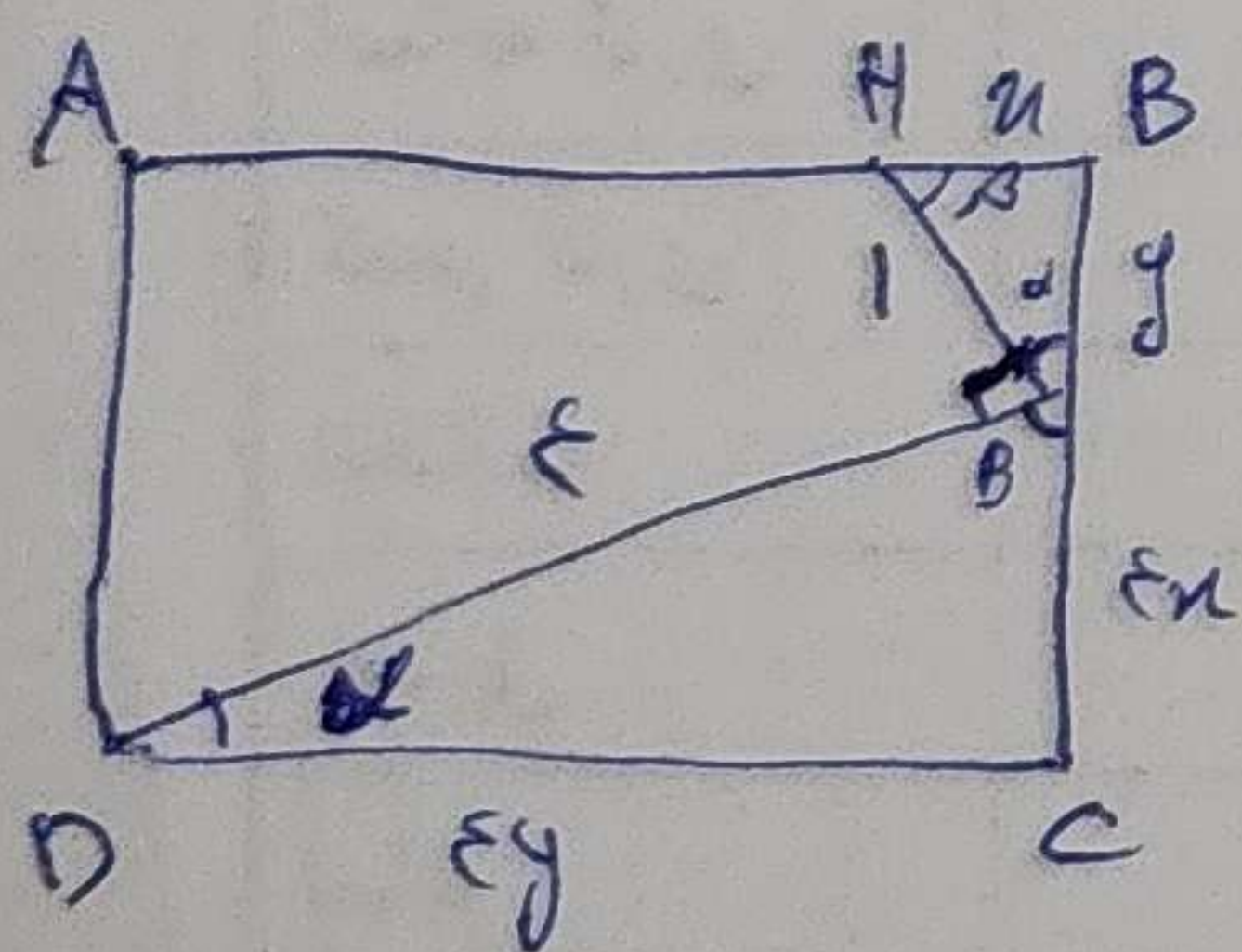
$$\frac{B_C \times AB}{B_N \times B_M} = \frac{\omega}{\mu_n} \times \frac{B_M + M_A}{B_M} = \mu$$

$$\frac{B_M + M_A}{B_M} = \frac{1}{\omega}$$

$$\frac{I_A M_A}{M_B} = \frac{q}{w}$$

$$\frac{m_A}{m_B} = \frac{F}{W}$$

$$\frac{BM}{AM} = \frac{Q}{E}$$



$$x^p + y^q = 1 \rightarrow E_{x+y} = e_y$$

$$E_y = \frac{14}{6}$$

$$m_y = 6.7$$

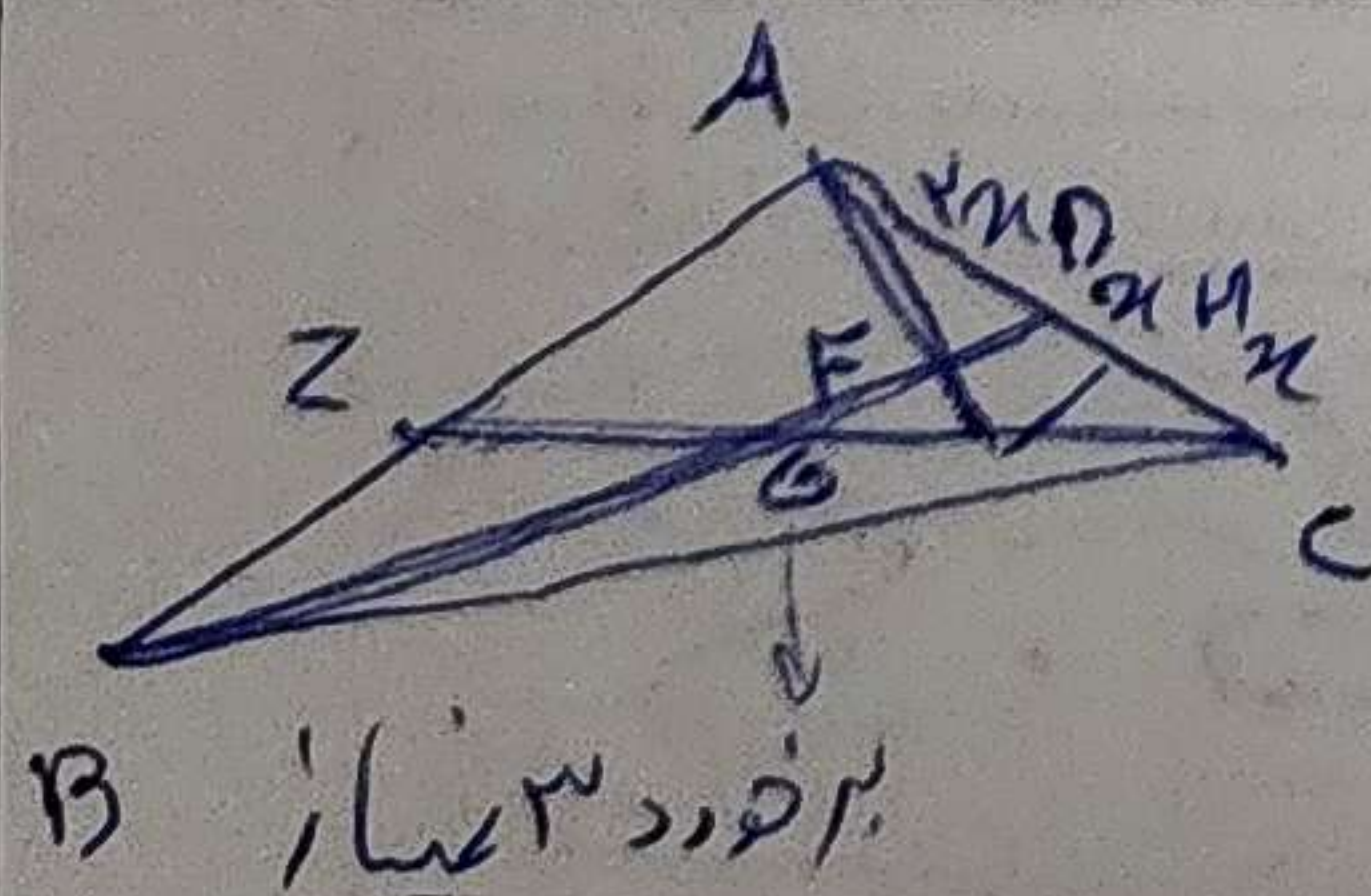
$$y = \frac{x}{x^2}$$

$$\frac{r \omega^2}{g} = 1$$

$$\frac{Q}{n} = 1$$

$$x = \frac{r}{\omega}, y = \frac{f}{\omega}$$

$$\epsilon_{\text{eff}} = (\epsilon_y)^{\frac{1}{2}} = \left(\frac{14}{\omega}\right)^{\frac{1}{2}} = \frac{\sqrt{14}}{\sqrt{\omega}}$$



$$GE = E_c$$

$$AB, EH \parallel BD \rightarrow BD \Rightarrow AD = DC$$

$$HE \parallel BD \Rightarrow \frac{FD}{EM} = \frac{AD}{AM} = \frac{PM}{PM} = \frac{P}{M}$$

$$HE \parallel BD \rightarrow \frac{EH}{GD} = \frac{CH}{CD} = \frac{n}{n} = 1$$

$$J_G^{-1} = \frac{GD}{BG} = \frac{1}{2}, \quad \frac{EH}{BD} = \frac{1}{9}$$

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

$$\frac{FD}{BD} \times \frac{FD}{EH} \times \frac{EH}{BD} = \frac{1}{9}$$

$$\frac{BD}{FP} = 9$$