

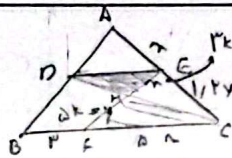
$$ED = PAE, \quad AC \rightarrow 9n'' + 9n'' = 1 \wedge n'' \rightarrow 1/18 \sqrt{2}$$

$$\mu\sqrt{\mu n} = Fy \sim y = \frac{\mu\sqrt{\mu n}}{F} \sim \frac{AF}{F}$$

$$K_2 = BE = \sqrt{11} \cdot 2 \rightarrow x = \frac{\sqrt{11} \cdot 2}{2} \Rightarrow FE$$

$$\frac{FE}{AF} = \frac{\frac{\sqrt{11}}{4} \times}{\frac{4\sqrt{11}}{4} \times} = \frac{\sqrt{11}}{4\sqrt{11}} \times \frac{\sqrt{11}}{\sqrt{11}} = \frac{11\sqrt{11}}{44\sqrt{11}}$$

$$\begin{aligned} \hat{A} &= \hat{A} \\ \hat{AED} &= \hat{ACB} \end{aligned} \left\{ \begin{array}{l} AED \sim ACB \rightarrow \frac{A}{12} = \frac{r}{n+1} \rightarrow n+r = 12 \rightarrow n = 6 \end{array} \right.$$

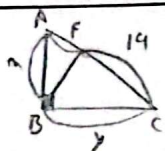


$$w_y = \omega_m \rightarrow m = w_k / y = A^k$$

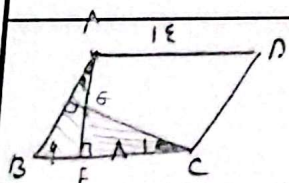
$$CFH \sim DHE \rightarrow \frac{EH}{HF} = \frac{r}{b} \rightarrow DE = 10m$$

$$DE \parallel BC \rightarrow \frac{DE}{BC} = \frac{AE}{AC} = \frac{r}{r+20} \sim \frac{r}{r+20} = \frac{1}{2} \rightarrow r = 20$$

$$a + c = 4, \forall D$$



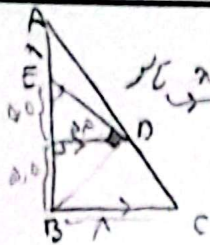
$$\begin{aligned} x^2 &= 5 \times y. & \rightarrow x &= \sqrt{5} \\ y^2 &= 14 \times x. & \rightarrow y &= \sqrt{14} \end{aligned} \quad \text{بنت الملة}$$



$$CE \overset{\text{A.A.}}{\sim} AB \rightarrow \frac{x}{4} = \frac{1}{x+4} \rightarrow x = 1$$

$$AF = 15$$

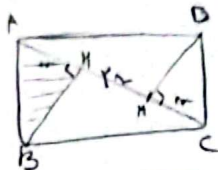
$$\left. \begin{array}{l} B + C_1 = 9 \\ B + A_1 = 9 \end{array} \right\} C_1 = A_1$$



$$\frac{x + \frac{1}{2}x}{x + 1} = \frac{\frac{1}{2}x}{1} \rightarrow 1x + \frac{1}{2}x = \frac{1}{2}x + \frac{1}{2}$$

$$x = \frac{1}{2}$$

F

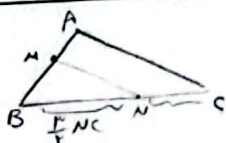


$$\begin{aligned} AB^2 &= x^2 + y^2 \\ BC^2 &= y^2 + z^2 \\ BH^2 &= x^2 + y^2 \end{aligned}$$

$$\frac{S_{ABCD}}{S_{ABH}} = \frac{AB \times BC}{BH \times AH \times \frac{1}{2}} \rightarrow$$

$$\frac{y^2 \times \sqrt{1+y^2}}{\sqrt{1+y^2} \times x \times \frac{1}{2}} = 1$$

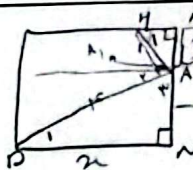
V



$$\frac{S_{ABC}}{S_{AMN}} = \frac{\frac{1}{2} BC \times AH}{\frac{1}{2} BN \times AM} = 1 \rightarrow \frac{BC}{BN} \times \frac{AH}{AM} = 1$$

$$\frac{AH}{AM} = \frac{1}{2} = \frac{AB}{BM} \rightarrow \frac{BM}{AB} = \frac{1}{2} \rightarrow \frac{BM}{AM} = \frac{1}{2} = \frac{1}{2} \times \frac{1}{2}$$

A

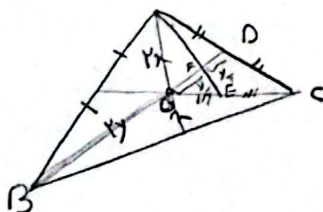


$$\begin{aligned} H_1 &= A_1 \\ A_1 &= B_1 \\ A_1 + A_2 &= 9 \end{aligned} \left. \begin{aligned} A_1 + D_1 &= 9 \\ A_2 + D_2 &= 9 \end{aligned} \right\} \rightarrow A_2 = A_1$$

$$\frac{AM}{AN} = \frac{1}{2} \rightarrow ANH = AMD \rightarrow \frac{m - \sqrt{14 - x^2}}{\sqrt{14 - x^2}} = \frac{1}{2} \rightarrow 2m - 2\sqrt{14 - x^2} = \sqrt{14 - x^2}$$

$$2m = 3\sqrt{14 - x^2} \rightarrow 14x^2 = 14(14 - x^2) \rightarrow x^2 = \frac{14 \times 14}{21}$$

q



$$\frac{BD}{FD} = \frac{1}{2} = \frac{1}{2}$$

1.