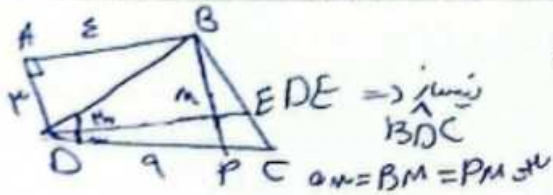


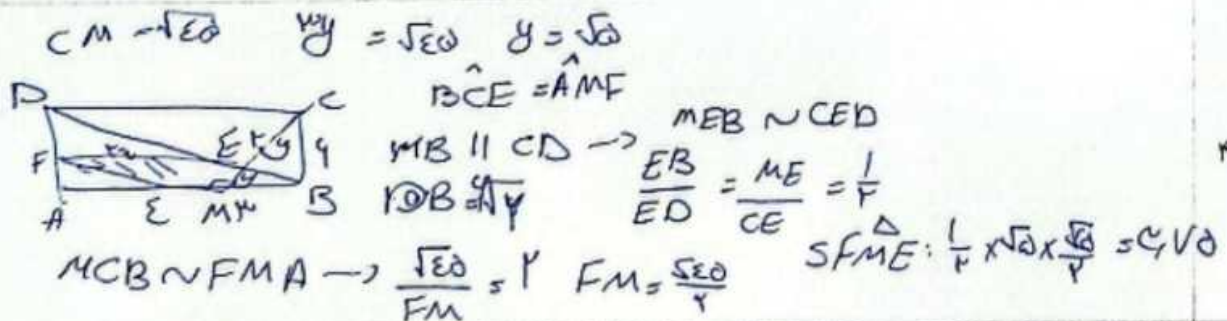
$DE \parallel BC \Rightarrow \triangle ADE \sim \triangle ABC$ $\frac{S_{ADE}}{S_{ABC}} = \left(\frac{4}{14.5}\right)^2 = \frac{4}{19}$

$\frac{4}{14.5} = \frac{4}{19}$ $19 = 4 + 15$ $15 = 14.5 - 4$ $15 = 14.5$

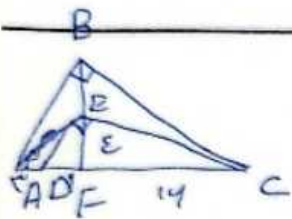


$\frac{BM}{MP} = \frac{BE}{EC} = 1$ $\frac{4}{4} = \frac{4}{4}$ $4 = 4$

$\hat{A}BF = \hat{C}AE = \hat{BCD}$ $\frac{4}{14.5} = \frac{4}{19}$ $19 = 4 + 15$ $15 = 14.5 - 4$ $15 = 14.5$



$\hat{DAE} = \hat{ACD}$ $\frac{CA}{AD} = \frac{CE}{AE} = \frac{AE}{DE}$ $AE^2 = CE \times DE = 4 \times 11$ $AE = \sqrt{44} = 2\sqrt{11}$ $2\sqrt{11} + 11 + 10 = 0$ $2\sqrt{11} = -11 - 10$ $2\sqrt{11} = -21$ $\sqrt{11} = -10.5$



$$DE^2 = DF \cdot DC$$

$$14 = 1 + FC$$

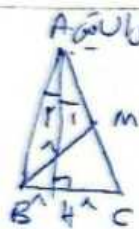
$$FC = 14$$

$$AB^2 = EC \cdot AC \quad AB = E\sqrt{2}$$

$$AC^2 = AB^2 + BC^2$$

$$E \cdot 0 = 1 + BC^2$$

$$BC = \sqrt{14}$$



مساوية = منتهى = منتهى

ABH و ACH

مساوية = منتهى = منتهى

$$\hat{A}_1 = \hat{A}_2 = E \cdot 0$$

$$\triangle ACH : AC^2 = AH^2 + HC^2 = 14$$

$$\frac{AB}{AC} = \frac{1}{\sqrt{2}}$$

$$\hat{A} = 90^\circ$$

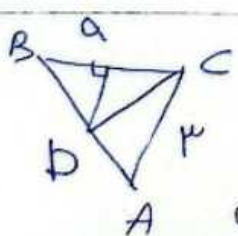
$$\triangle ABM : BM^2 = AB^2 + AM^2 = (1\sqrt{2})^2 + (E\sqrt{2})^2 = 14$$

$$BM = \sqrt{14}$$

$$r_x + B = 90^\circ \quad BD^2 + CD^2 = BC^2 \rightarrow BC = 2\sqrt{2} = 2BE = 2EC$$

$$\frac{r}{\sqrt{2}} = \frac{E}{AE} = \frac{2\sqrt{2}}{2} \quad AE = 2\sqrt{2}$$

$$S_{ABE} = \frac{1}{2} \times 2\sqrt{2} \times \frac{2\sqrt{2}}{2} = 2$$



$$CD = CE \cdot \frac{A}{BC}$$

$$\frac{11}{1} \quad CE = \frac{9}{1}$$

$$CA^2 = AD^2 + CD^2 \rightarrow CD = \sqrt{9 - \frac{9}{11}} = \frac{9}{\sqrt{11}}$$

$$AB^2 = 40 = 4\sqrt{10}$$

$$CA^2 = AD \times AB \rightarrow AD = \frac{11}{\sqrt{11}}$$

A