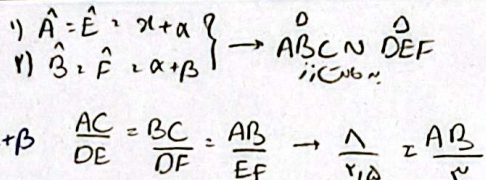
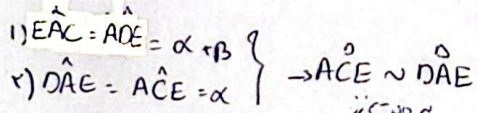
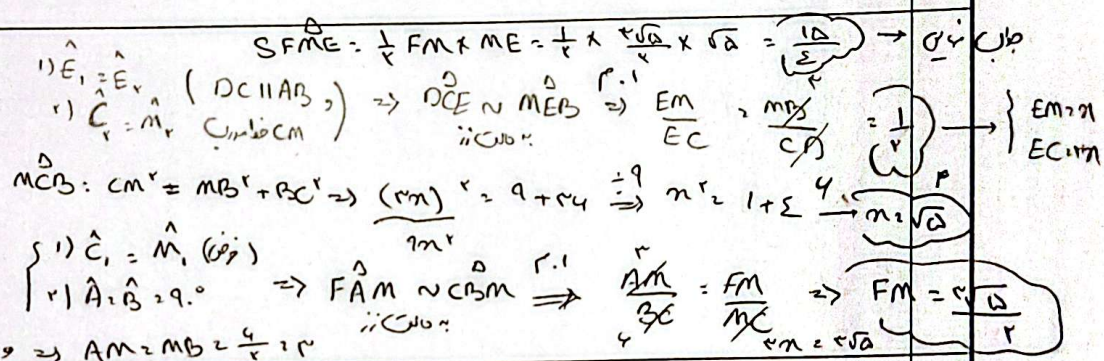


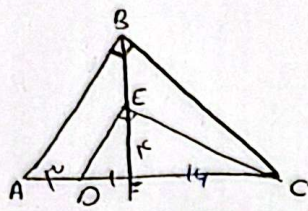
$\Rightarrow \frac{r}{x} = \frac{ME}{x} \rightarrow ME = r$



$$\rightarrow AB = \frac{r \times \Delta}{r_1 \Delta} = 9,4$$



$$\frac{AE}{EC} = \frac{ED}{AE} \rightarrow \frac{AE}{1.0 + \pi} = \frac{1.0}{AE} \rightarrow AE^r = 1.0 + 1.0 \cdot \pi$$



$$EF^2 = DF \times FC$$

$$14 = 1 \times FC \Rightarrow FC = 14$$

$$BC^2 = FC \times AC$$

$$BC^2 = 14 \times 14 \Rightarrow BC = 14$$

DE = ?

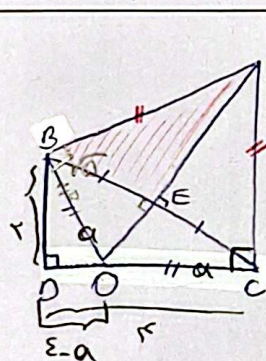
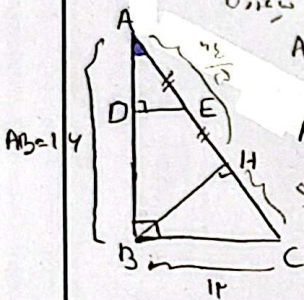
$$AB^2 = AC^2 = AB^2 + BC^2 \rightarrow AC^2 = 14^2 + 14^2 \rightarrow AC^2 = 2 \times 14^2 \rightarrow AC = 14\sqrt{2}$$

$$ABC: BH \times AC = AB \times BC \rightarrow BH = \frac{14 \times 14}{14\sqrt{2}} = \frac{14}{\sqrt{2}}$$

$$BC^2 = CH \times AC \rightarrow 14^2 = CH \times 14\sqrt{2} \rightarrow CH = \frac{14}{\sqrt{2}}$$

$$AC - CH = AH \rightarrow AH = 14\sqrt{2} - \frac{14}{\sqrt{2}} = \frac{28\sqrt{2} - 14}{\sqrt{2}}$$

$$ADE \sim AHB \Rightarrow \frac{AE}{AB} = \frac{DE}{BH} \Rightarrow \frac{AE}{14} = \frac{DE}{\frac{14}{\sqrt{2}}} \Rightarrow DE = \frac{AE \times \sqrt{2}}{2}$$

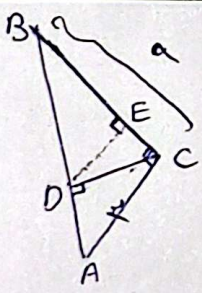


$$OC = OD \Rightarrow AO \perp BC \Rightarrow BE = EC \rightarrow AB = AC$$

$$BDC: BD^2 + DC^2 = BC^2 \rightarrow 14^2 + 14^2 = BC^2 \rightarrow BC = 14\sqrt{2} \Rightarrow BE = EC = 7\sqrt{2}$$

$$BEO: (14)^2 + (7\sqrt{2})^2 = BO^2 \rightarrow BO = 14\sqrt{2}$$

$$BEO: EO^2 + EB^2 = BO^2 \rightarrow EO^2 + 14^2 = (14\sqrt{2})^2 \rightarrow EO = 14\sqrt{2}$$

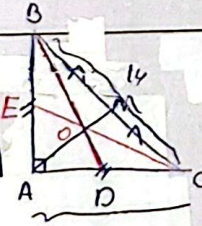


$$ACB: AB^2 = AC^2 + BC^2 \rightarrow AB^2 = 14^2 + 14^2 \rightarrow AB = 14\sqrt{2}$$

$$AC \times BC = AB \times CD \rightarrow 14 \times 14 = 14\sqrt{2} \times CD \Rightarrow CD = \frac{14}{\sqrt{2}}$$

$$BC^2 = BD \times AB \rightarrow 14^2 = BD \times 14\sqrt{2} \Rightarrow BD = \frac{14}{\sqrt{2}}$$

$$BDC: BD^2 = BE \times BC \rightarrow \left(\frac{14}{\sqrt{2}}\right)^2 = BE \times 14 \Rightarrow BE = \frac{14}{\sqrt{2}}$$



$$AM = \frac{1}{2}BC \Rightarrow AM = 7\sqrt{2}$$

$$AB^2 = AC^2 + BC^2 \rightarrow AB^2 = 14^2 + 14^2 \rightarrow AB = 14\sqrt{2}$$

$$ABD: BD^2 = AB^2 + AD^2 \rightarrow BD^2 = (14\sqrt{2})^2 + AD^2 \rightarrow BD = 14\sqrt{2}$$

$$ACE: AE^2 + AC^2 = EC^2 \rightarrow CE^2 = 14^2 + 14^2 \Rightarrow CE = 14\sqrt{2}$$