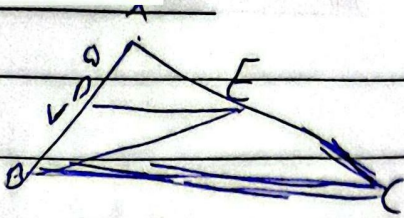


①

 $DE \parallel BC$ $\triangle ADE \sim \triangle ABC$

$$\frac{AD}{AB} = \frac{1}{4}$$

$$\frac{S_{ADE}}{S_{ABC}} = \left(\frac{1}{4}\right)^2 = \frac{1}{16}$$

$$\frac{S_{ABD}}{S_{ABC}} = \frac{1}{4}$$

$$S_{BDE} = S_{ABD} - S_{ADE} = \left(\frac{1}{4} - \frac{1}{16}\right) S_{ABC}$$

$$S_{ABD} = \frac{1}{4} S_{ABC}$$

$$S_{BCE} = S_{ABC} - S_{ABE} = \frac{11}{16} S_{ABC}$$

$$\frac{S_{BCE}}{S_{BDE}} = \frac{\frac{11}{16}}{\frac{3}{16}} = \frac{11}{3} \Rightarrow S_{BCE} = \frac{11}{3} S_{BDE}$$

② $BDE \sim BDM$ $AD = 4$ $BM = AB = 4$ $DC = 9$ $DM = AB = 4$ $AB = 4$

$\left(\frac{AB}{BC} \right) = \left(\frac{BM}{DM} \right) = \left(\frac{4}{9} \right) = \left(\frac{4}{9} \right) \Rightarrow BC = 9$

(3)

 EF, μ PF, μ, δ

$$ABF = (AE - BC)$$

$$\frac{AB \cdot EF}{DE} = \frac{\mu}{\mu, \delta} \cdot \frac{9}{\mu, \delta} \cdot \mu, \delta$$

(4)

$$\frac{BE}{BC} = \frac{MF}{MA}$$

$$BC, \mu$$

$$MA, \mu$$

$$MF = \frac{\mu}{4} \times BE = \frac{BE}{4}$$

$$FE = \mu \sqrt{E}$$

$$S = \frac{1}{P} \times FE \times h \Rightarrow \frac{1}{P} \times E \sqrt{E} \times \frac{\mu}{\sqrt{P}}$$

$$S = \frac{1}{P} \times \mu, \delta$$

(5)

$$BE, DC, \mu \rightarrow BC, \mu, \delta, \mu, \delta, \mu, \delta$$

 AB, μ BE, μ, δ EH, μ, δ (DC, μ, δ)

$$\begin{array}{l} AD \text{ is } \perp \\ \text{Join } EF \text{ and } DF \\ DF \perp EF \end{array} \rightarrow AF \text{ is } \perp$$

$$\hat{ABC} \sim \hat{CED} \text{ is } 90^\circ$$

$$\frac{BC}{CE} \sim \frac{AB}{ED} \rightarrow ED \text{ is } EF + FD \text{ is } 1$$

$$\frac{BC}{CE} \sim \frac{1}{\omega}$$

$$BC \sim \frac{1}{\omega} \times EF$$

$$= \frac{1 \times \sqrt{2}}{\omega}$$

$$CE = \sqrt{EF^2 + FD^2}$$

$$\rightarrow FC \text{ is } AF \text{ is } E$$

$$CE = \sqrt{E^2 + E^2} = \sqrt{2} E$$

$$(7) \text{ Ques } \sqrt{1^2 + 1^2} \text{ is } 1\sqrt{2}$$

$$\text{also } m \text{ is } \frac{1}{r} \sqrt{r^2 + b^2 + c^2} \rightarrow a \text{ is } 14$$

$$m = \frac{1}{r} \sqrt{r(14)^2 + r(1\sqrt{2})^2 - (1\sqrt{2})^2} \text{ is } \frac{1}{r} \sqrt{46} \text{ is } \sqrt{46}$$

$$(8) BO \text{ is } \perp CD \text{ is } \perp \rightarrow DO \text{ is } OC \text{ is } \perp$$

$$\Delta \text{ is } \frac{1}{r} \times r \times r \text{ is } \perp \rightarrow S_{ABE} \text{ is } S_{BOC} \text{ is } \perp$$

$$\Delta ABE \sim \Delta BOC \rightarrow \frac{AB}{BO} \sim \frac{AE}{OC}$$

(a) $AC \perp BC$ $DE \perp BC$ $\rightarrow BE?$

$$AB \perp \sqrt{AC^2 + BC^2} \quad \sqrt{10^2 + 9^2} \quad \sqrt{9} \quad \sqrt{10}$$

$$\frac{BE}{9} = \frac{10}{10\sqrt{10}} \rightarrow BE = \frac{9}{\sqrt{10}} \left(\frac{9\sqrt{10}}{10} \right)$$

(10) $AB \perp 14$
 $BC \perp 14$

~~$AE \perp BC$~~
 ~~$DE \perp BC$~~

$$AC \perp \sqrt{AB^2 + BC^2} \quad \sqrt{14^2 + 14^2} \quad \sqrt{60} \quad \sqrt{10}$$

$$AH \perp \frac{AB}{AC} = \frac{14}{10} \quad \sqrt{10}$$

$$AE \perp \frac{AH}{10} \quad 9, 10 \rightarrow ABC \sim ADH$$

$$\frac{DE}{14} = \frac{10}{10} \rightarrow DE = 14 \times \frac{10}{10} = 14$$

$$\frac{DE}{BC} = \frac{AE}{AC}$$