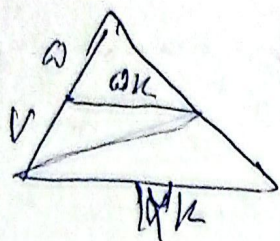


①



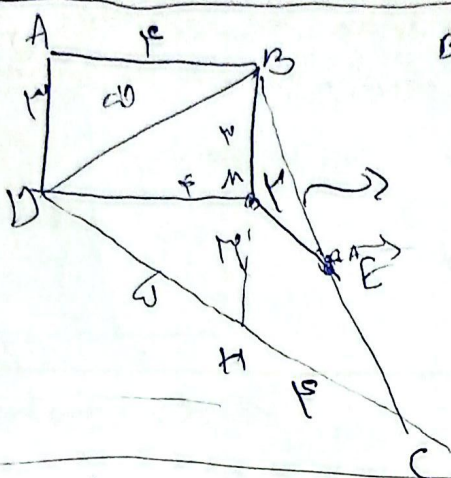
$$h_1 = h_2$$

$$S_{BEC} = \frac{1}{2} k \times h_1$$

$$S_{BDC} = \frac{1}{2} k \times h_2$$

$$\frac{\frac{1}{2} k \times h_1}{\frac{1}{2} k \times h_2} = \frac{1}{1}$$

②



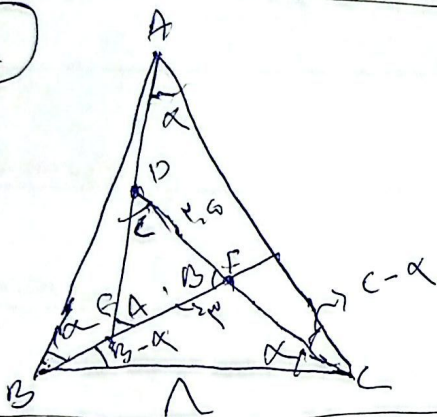
$$BDM = DMH \rightarrow \text{vertical angles}$$

$$DH = \omega \quad HC = \psi$$

$$\text{vertical angles} \Rightarrow ME \parallel HC$$

$$ME = \psi$$

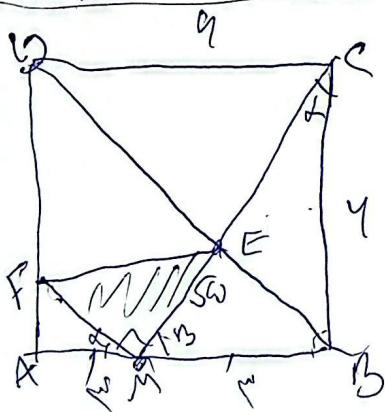
③



$$\frac{BC}{DE} = \frac{AB}{AE} \Rightarrow \frac{1}{\psi \omega} = \frac{1}{\psi}$$

$$\frac{\psi \times 1 \times \psi}{\omega} = AB \Rightarrow \psi \times \psi = AB \times \omega$$

④



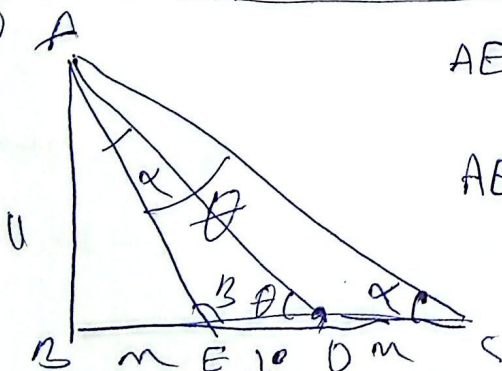
$$MC = \sqrt{5} \omega \quad \frac{EC}{ME} = \frac{\psi}{1}$$

$$\Leftrightarrow \sqrt{5} \omega \times \frac{1}{\psi} = BE = \omega$$

$$EM = \omega \omega$$

$$S_{FME} = \frac{1}{2} \times 1 \times \omega \sqrt{5} \times \omega = \frac{1}{2} \times \frac{\psi}{\psi} \times \omega = \frac{1}{2} \omega$$

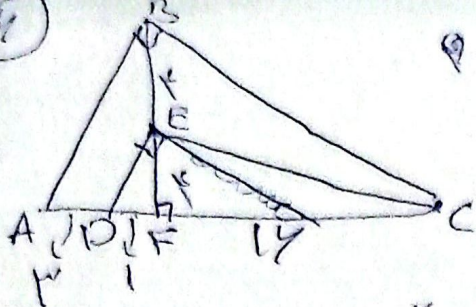
⑤



$$AEC \sim AED \quad \frac{AE}{1a} = \frac{AC}{AD} = \frac{1a+m}{AE}$$

$$\left. \begin{aligned} AE^2 &= 1a \times (1a+m) \\ AE^2 &= m^2 + 1\psi^2 \end{aligned} \right\} \quad \begin{aligned} m^2 - 1a \times m + 1\psi^2 &= 0 \\ m &= \psi \pm \sqrt{\psi^2 - 1a \times \psi} \end{aligned}$$

④

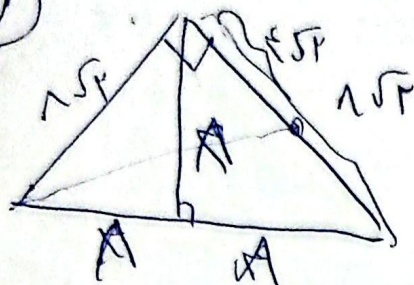


$$EF^2 = DF \times FC = 15 \times 1 = 1 \times FC \Rightarrow FC = 15$$

$$BF^2 = 14 \times 17 \Rightarrow BF = 17 \times 14 \Rightarrow BE = 17$$

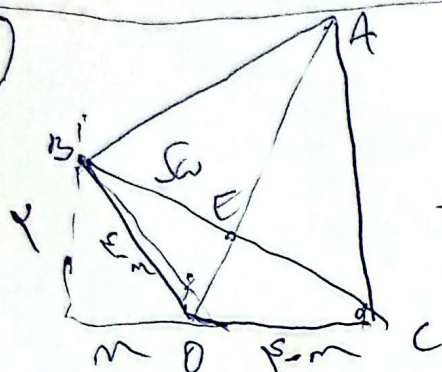
$$FB^2 + FC^2 = BC^2 \Rightarrow BC = 17\sqrt{2}$$

⑤



$$BC = \sqrt{14^2 + 17^2} = 17\sqrt{2}$$

⑥



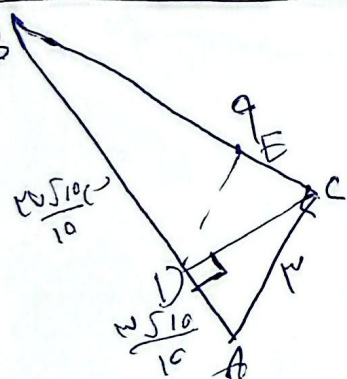
$$m \times \frac{1}{p} = (p-m) \times \frac{1}{p} \Rightarrow m = \frac{p}{2}$$

$$BC^2 = \frac{1}{p} \times \frac{1}{p} \Rightarrow BC = \frac{1}{p} \Rightarrow BE = \frac{1}{p}$$

$$\Rightarrow OE = \frac{\sqrt{2}}{p} \Rightarrow AE = \frac{1}{p}$$

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

⑦



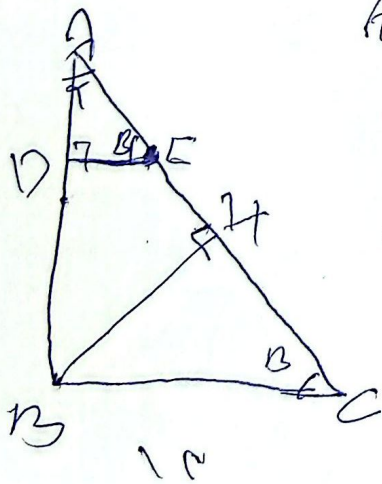
$$AB = 17\sqrt{10}$$

$$q = AD \times 17\sqrt{10}$$

$$AD = \frac{17}{\sqrt{10}} = \frac{17\sqrt{10}}{10}$$

$$\frac{BE}{BC} = \frac{\frac{17\sqrt{10}}{10}}{\frac{17\sqrt{10}}{1}} = \frac{1}{10} = 0.1$$

⑧



$$AC = 17$$

$$AB^2 = AC \times AH$$

$$\Rightarrow 14 \times 14 = 17 \times AH$$

$$AH = \frac{14 \times 14}{17} \Rightarrow$$

$$AED \sim ABC$$

$$AE = \frac{14 \times 14}{17}$$

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

$$\frac{14}{17} = \frac{14 \times 14}{17 \times 17}$$

BC, AC, AB