

$$S_{ARC} = \frac{1}{r\omega} \epsilon t$$

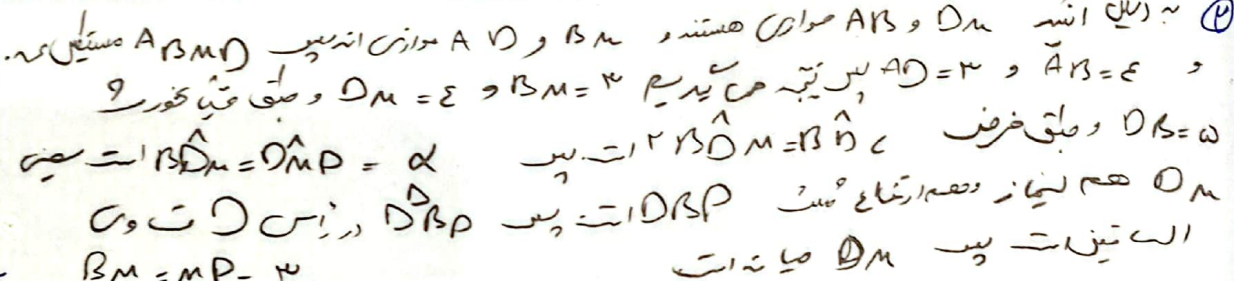
$$S_{HOE} = \frac{v \cdot t}{\omega}$$

$$\frac{S_{ADE}}{S_{BDE}} = \frac{\omega \times D \times EH}{\omega \times V \times EH} = \frac{\omega}{V} \rightarrow \frac{t}{S_{BDE}} = \frac{\omega}{V}$$

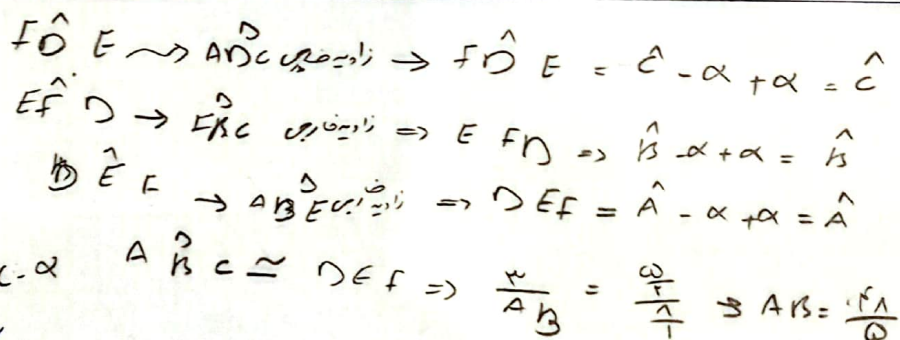
$$S_{BEC} = S_{ANC} - S_{ADE} - S_{BDE} = \frac{1}{2} \epsilon t - \frac{1}{2} \epsilon t - u = \frac{1}{2} \epsilon t$$

$$S_{BCF} = \frac{\Delta E}{r_{\omega}} t$$

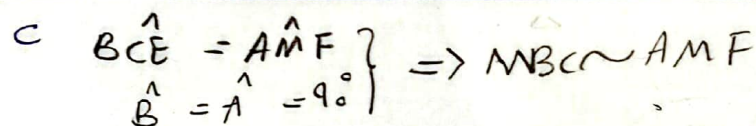
$$\frac{S_{BCE}}{S_{NOF}} = \frac{\frac{18}{10}t}{\frac{1}{10}t} = 18$$



c $ME = \frac{1}{F} P_C \Rightarrow ME = \frac{1}{F} \times \Sigma = \nu$



$$A \stackrel{\circ}{B} C \simeq D \in f \Rightarrow \frac{\pi}{A \stackrel{\circ}{B}} = \frac{\omega}{\frac{f}{1}} \Rightarrow A \stackrel{\circ}{B} = \frac{f \cdot 1}{\omega}$$



$$\Rightarrow \frac{AM}{BC} = \frac{AF}{MB} = \frac{1}{4} \Rightarrow AF = \frac{1}{4} MB$$

$$\Rightarrow \frac{q}{\epsilon} + q = F_M \quad \Rightarrow F_M = \frac{qV_0}{r} \quad \Rightarrow \frac{q}{\epsilon} + q = \frac{qV_0}{r}$$

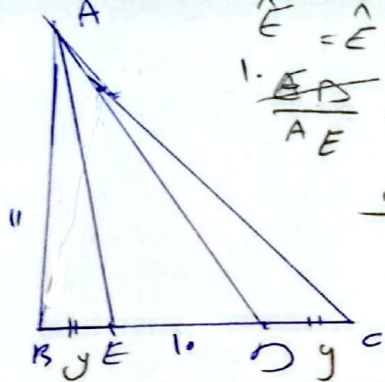
$$\Sigma m = 5$$

$$\left. \begin{array}{l} \hat{E}_1 = \hat{E}_r \\ \hat{C}_1 = \hat{M}_r \end{array} \right\} \Rightarrow M E B \sim E D C \Rightarrow \frac{M B}{C D} = \frac{E M}{C E} = \frac{1}{r}$$

$$\Rightarrow K_{EM} = CE \Rightarrow \Psi_{EM} = \Psi \sqrt{\omega}$$

$$9 + 36 = mc^2$$

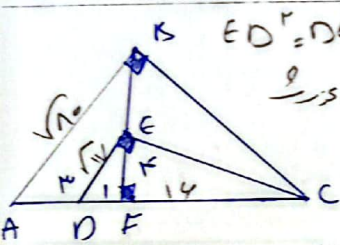
$$\Rightarrow mc = 3\sqrt{5}$$



$$\hat{E} = \hat{E} \text{ و } \hat{A} \hat{C} \hat{D} = \hat{D} \hat{A} \hat{E} \Rightarrow \triangle E \hat{D} \sim \triangle E \hat{C}$$

$$\frac{AE}{AE} = \frac{AE}{y+10} \rightarrow 100 + 10y = AE^2$$

$$\text{نکته: } AE^2 = 100 + 10y \Rightarrow 100 + 10y = 100 + 10y \rightarrow y = 10$$



$$ED^2 = DE \cdot DC \Rightarrow EC = 14$$

$$\triangle ABC \sim \triangle AEF \rightarrow \frac{FA}{BA} = \frac{AB}{AC} = \frac{FB}{BC}$$

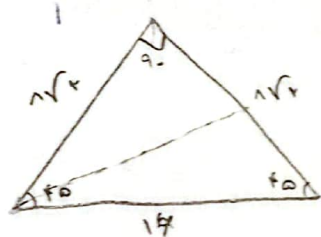
$$\text{نکته: } AB^2 + BC^2 = AC^2$$

$$100 + BC^2 = 140$$

$$BC = \sqrt{40}$$

$$\frac{FA}{BA} = \frac{AB}{AC} = \frac{FB}{BC}$$

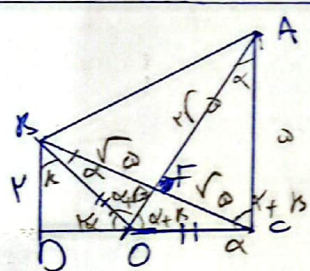
$$\frac{F}{BA} = \frac{BA}{F} \rightarrow BA = \sqrt{10}$$



$$m_b^2 + m_c^2 = 2m_a^2$$

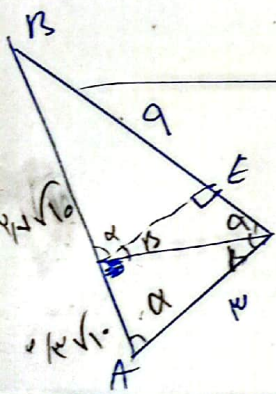
$$m_b^2 = 2 \times 14 \rightarrow m_b = \sqrt{28} \rightarrow \sqrt{14}$$

$$m_b = m_c$$



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

$$\frac{14}{14\sqrt{2}} = \frac{F}{AE} \rightarrow AE = 14\sqrt{2} \rightarrow SAHE = \frac{AE \cdot EC}{F} = 0$$

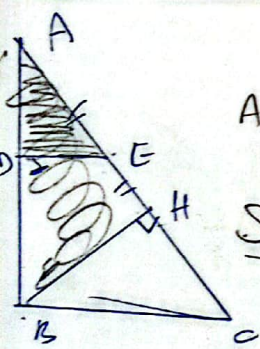


$$\triangle ABC: \sim \triangle A \quad \sqrt{10}$$

$$\triangle BCD: \sim \triangle B \quad 9 \rightarrow BD = \frac{11}{\sqrt{10}} = \frac{11\sqrt{10}}{10}$$

$$\triangle BDE: \sim \triangle B \quad 10$$

$$\Rightarrow BD = 11$$



$$AC = 10$$

$$\triangle ADE \sim \triangle ABH \rightarrow \frac{DE}{BH} = \frac{AE}{14}$$

$$\frac{14 \times 14}{14} = \frac{BH \times 10}{14} \rightarrow BH = 9.8$$

$$14^2 = AH \times 10 \rightarrow \frac{AH}{14} = \frac{AE}{10} \rightarrow AE = 10$$

$$DE = \frac{9.8 \times 14}{14} = 9.8$$