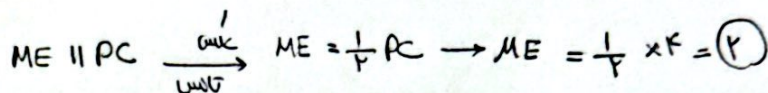
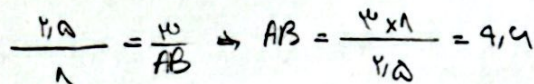
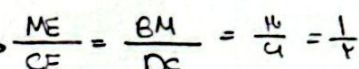


$$\text{DEB, EBC} : \frac{1}{\sum_{eh} \frac{1}{E_h}} \Rightarrow \frac{J_{BCE}}{J_{BDE}} = \frac{E_C}{E_E} = \frac{11\%}{22\%} = 0,5$$

$$\frac{DF}{BC} = \frac{EF}{AB}$$

$$\sqrt{x} \cdot x^{\frac{1}{2}}$$


$$\frac{AM}{BC} = \frac{MF}{MC} \Rightarrow \frac{10}{9} = \frac{MF}{15\sqrt{2}}$$

$$CM^p = \cancel{B_1^p} + \cancel{B_2^p} \Rightarrow \sqrt{A} \Rightarrow \sqrt{A}$$

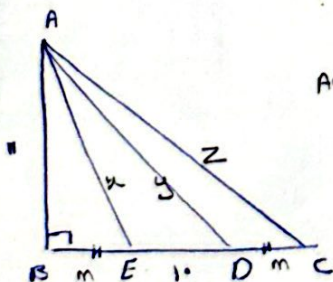
$$S_{mFE} = \frac{1}{Y} \times m_E \times m_F =$$

$$m_E = \sqrt{\omega}, \quad c_E = 2\sqrt{\omega}$$

$$\frac{1}{r} \left(\sqrt{a} \times \frac{1}{r} \sqrt{a} \right) = \frac{1}{r} = \boxed{\frac{1}{r}}$$

$$\triangle ACE \sim \triangle AED \quad \begin{cases} \hat{E}_1 = \hat{E}_1 \\ \hat{DAE} = \hat{ACD} \end{cases}$$

$$\frac{u}{10+m} = \frac{\cancel{g}}{\cancel{2}} = \frac{10}{u} \rightarrow$$



$$\Rightarrow 2x = 10(1+m) \Rightarrow |x| + m^2 = 100 + 10m \Rightarrow m^2 - 10m + |x| = 0$$

$(m-v)(m-v') = 0$
 $v = v'$

ف. BC = 14 و DF = 1 ، EF = 1 ، AD = 1 ، و AB = AC = 14 و DE = 1

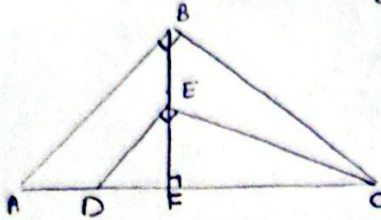
$$\triangle DEC : EF^2 = DF \times FC \Rightarrow F^2 = 1 \times FC \Rightarrow FC = 14$$

$$\triangle ABC : BF^2 = AF \times FC$$

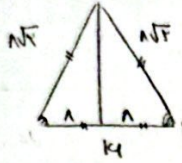
$$BF^2 = F \times 14 = 14 \Rightarrow BF = 1$$

$$\triangle BFC : BC^2 = BF^2 + FC^2 \Rightarrow BC^2 = 1^2 + 14^2 = 1^2 (1 + 14)$$

$$\Rightarrow BC = \sqrt{15}$$



ف. BC = 14 و DF = 1 ، EF = 1 ، AD = 1 ، و AB = AC = 14 و DE = 1



$$\sqrt{1^2 + 1^2} = \sqrt{2} = \sqrt{2} \times 1 = \sqrt{2}$$

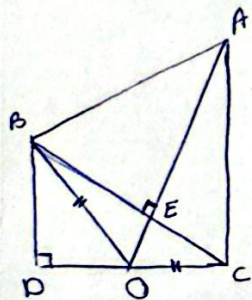
$$a = b = \sqrt{2}$$

$$c = 14$$

$$m_a = \frac{1}{2} \sqrt{2b^2 + 2c^2 - a^2} \Rightarrow \frac{1}{2} \sqrt{2(14^2) + 2(14^2) - 14^2}$$

$$m = \frac{1}{2} \sqrt{2(14^2) + 2(14^2) - 14^2} \Rightarrow m = \frac{1}{2} \sqrt{4 \times 14^2} \Rightarrow m = \frac{1}{2} \sqrt{4 \times 196} \Rightarrow m = \frac{1}{2} \sqrt{784} \Rightarrow m = \frac{1}{2} \times 28 = 14$$

ف. BC = 14 و DF = 1 ، EF = 1 ، AD = 1 ، و AB = AC = 14 و DE = 1



$$\left. \begin{array}{l} OE = OE \\ OB = OC \\ O_1 = O_2 \end{array} \right\} \triangle BOE \sim \triangle OCE \rightarrow BE = EC$$

$$BC = \sqrt{F^2 + 14^2} = \sqrt{1^2 + 14^2} = \sqrt{197} \Rightarrow 2\sqrt{14}$$

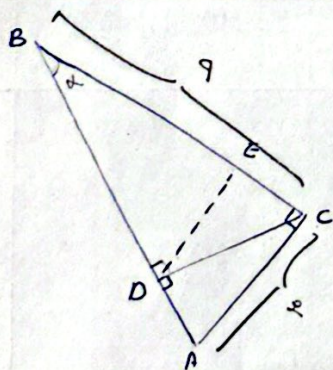
$$EC = \sqrt{14}$$

$$\left. \begin{array}{l} \hat{D} = \hat{E} = 90^\circ \\ DB \parallel AC \rightarrow \hat{B}_1 = \hat{C}_1 \end{array} \right\} \triangle BCD \sim \triangle AEC \rightarrow \frac{1}{\sqrt{14}} = \frac{F}{AE} = \frac{14}{a} \rightarrow AE = 14\sqrt{14}$$

$$S_{ABE} = \frac{AE \times EC}{2} = \frac{14\sqrt{14} \times \sqrt{14}}{2} = \frac{14 \times 14}{2} = 98 \rightarrow \text{جواب}$$

(\hat{C} = 90^\circ) ف. BC = 14 و DF = 1 ، EF = 1 ، AD = 1 ، و AB = AC = 14 و DE = 1

$$BA^2 = 1^2 + 14^2 \Rightarrow 1 + 196 = 197 \rightarrow BA = \sqrt{197} \Rightarrow 14\sqrt{2}$$



ف. BC = 14 و DF = 1 ، EF = 1 ، AD = 1 ، و AB = AC = 14 و DE = 1

$$\triangle ABH \rightarrow DE \times AB = BH \times AE$$

$$S = \frac{BH \times 14}{2} = \frac{14 \times 14}{2} \rightarrow BH = 9.8$$

$$14^2 = 1^2 + AH^2 \rightarrow 14^2 = 1 + AH^2 \Rightarrow AH = 14$$

$$DE = \frac{9.8 \times 14}{14} = 9.8 \times 14 = 137.2$$

