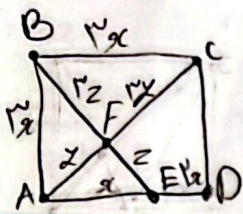


«A» (مردود)

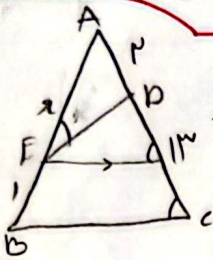


$$BE \rightarrow \sqrt{2^2 + 1^2} = \sqrt{5}x$$

$$EF \rightarrow \frac{1}{2} \sqrt{10}x$$

$$AC \rightarrow 2\sqrt{2}x \quad \frac{EF}{AF} = \frac{\frac{1}{2} \sqrt{10}x}{\frac{1}{2} \times 2\sqrt{2}x} = \left(\frac{\sqrt{5}}{2} \right)$$

-1



$$\triangle ADE \sim \triangle ABC \Rightarrow \frac{x}{x+1} = \frac{1}{2} \Rightarrow x = 1$$

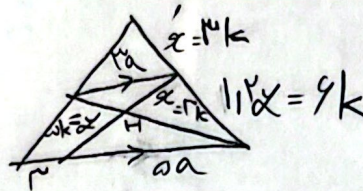
-2

$$x = 2k$$

$$x = \omega k$$

$$\frac{2a}{2+0a} = \frac{2k}{9k} = \frac{1}{9} \rightarrow a = \frac{2}{9} = 0.1\bar{1}$$

$$BC = 9/10$$

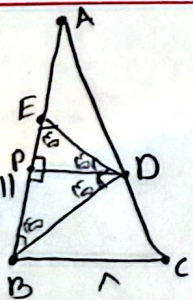


-3

$$\triangle BAF \sim \triangle ECF \rightarrow \frac{BF}{EF} = \frac{AF}{CF} \rightarrow \frac{4}{x} = \frac{1+x}{1} \rightarrow x(x+1) = 4, x = 1$$

$$AF = 1+x = 2$$

-4



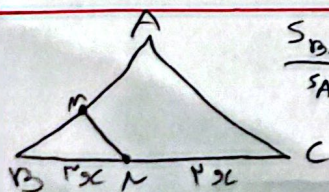
$$\frac{12}{9} = \frac{4}{10} \rightarrow \sqrt{10} = ED$$

$$DP = \frac{1}{2} \times \sqrt{10} \Rightarrow \omega/10 = EP, PD$$

$$\frac{x+\omega/10}{x+11} = \frac{\omega/10}{1}$$

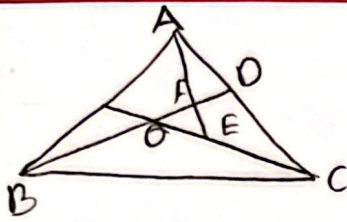
$$10x + \omega = \omega x + \frac{1}{10} \Rightarrow \omega = \frac{9}{9}$$

-5



$$\frac{S_{BMN}}{S_{ABC}} = \frac{BM \times BN}{BA \times BC} = \frac{BM}{AB} \times \frac{1}{2} = \frac{1}{4} \rightarrow \frac{BM}{AB} = \frac{1}{2} \rightarrow \frac{BM}{AM} = \frac{1}{1} = 1$$

-6



$$BF = FD, \text{ and } CF = FE$$

$$BD = BF + FD = FD + FD = 2FD$$

$$\frac{BD}{FD} = 2$$