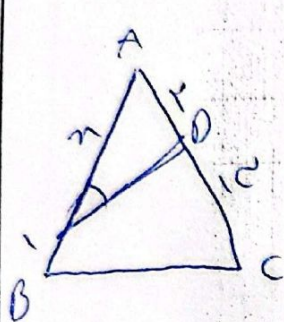


نام و نام خانوادگی پاسخنامه تشریحی تکلیف شماره ۲۱ کلاس B

$$AC = AF + CF = AF \quad (AF = CF) \Rightarrow AF = CF \Rightarrow \frac{AE}{CB} = \frac{EF}{BF}$$

$$AF = \frac{AC}{2} = \frac{2\sqrt{5}}{2} \Rightarrow \frac{EF}{AF} = \frac{BC}{AB}, \frac{EF}{AF} = \frac{AE}{BC}, \frac{EF}{AF} = \frac{1}{2}$$

$$\frac{\sqrt{50}}{2} = \frac{\sqrt{50}}{2}$$



$$\frac{AE}{AC} = \frac{AD}{AB} = \frac{ED}{BC}$$

$$n + n = 2 \Rightarrow n^2 + n - 2 = 0$$

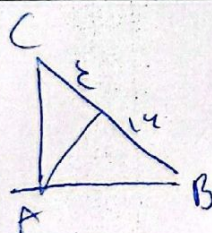
$$\downarrow \quad \downarrow$$

$$-1 \quad 2 \rightarrow \text{C}$$

$$y = \frac{1}{2}n$$

$$\frac{n}{\frac{1}{2}n} = \frac{2}{1} \Rightarrow BC = 2$$

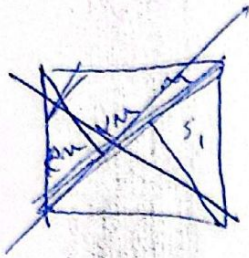
$$\frac{1}{2} \times \frac{1}{1} = \frac{1}{2}$$



$$AB^2 = 1^2 + 2^2 = 5 \Rightarrow AB = \sqrt{5}$$

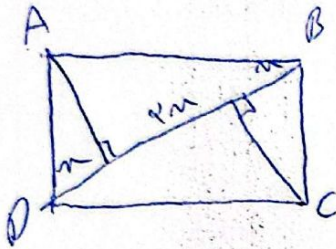
$$AC^2 = 1^2 + 2^2 = 5 \Rightarrow AC = \sqrt{5}$$

$$\frac{BO}{BF} = \frac{OC}{AF} = \frac{BC}{AB} \Rightarrow EF = 1 \Rightarrow AF = 2$$



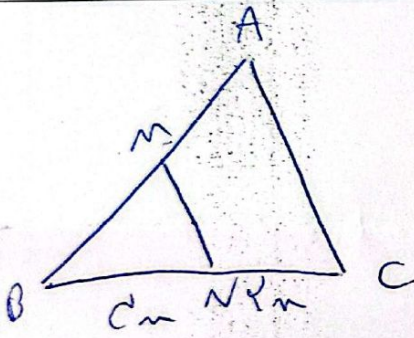
$$\frac{E}{O} = \frac{AE}{EB} = \frac{AE}{11} \rightarrow \frac{C}{O} = 4.4$$

6



برابر

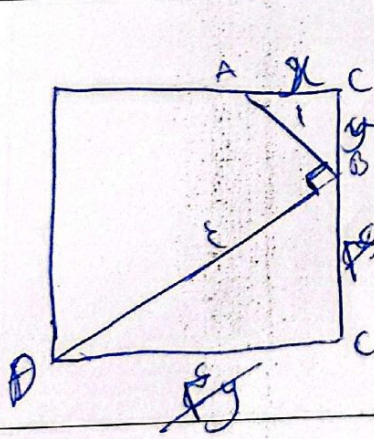
7



$$\frac{S_{BMN}}{S_{ABC}} = \frac{BM \cdot BN}{BA \cdot BC} = \frac{BM}{AB} \times \frac{CN}{C} = \frac{1}{C}$$

$$\frac{BM}{AB} = \frac{O}{a} \quad \frac{BM}{AM} = \frac{O}{E}$$

8



$$ABC \cong BCD \rightarrow E = \text{برابر}$$

$$x = \frac{C}{E} y$$

$$9y^2 + 14y^2 = 14 \Rightarrow 23y^2 = 14 \Rightarrow y = \frac{E}{O} \Rightarrow S = \frac{204}{40}$$

9

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

10