

باز هم دقت

دقت

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$$DE = m \rightarrow BC = 3m, EC = 3m - 3 \quad ED = 4 \quad AC = \text{قطر} = 3\sqrt{2} \quad (1)$$

$$DEH \sim FHC \rightarrow \frac{m}{3m-3} = \frac{3}{5} \quad AE = 1 \quad BE = \sqrt{9+1} = \sqrt{10}$$

$$3m = 9m - 9 \quad 3m = 9 \quad m = 3 \quad \text{نسبت } k = \frac{1}{3}$$

$$BC = 3m = \frac{24}{3}$$

نسبت مربع (AD) = 3

$$AEF \sim BFC \rightarrow \frac{EF}{AF} = \frac{3}{3\sqrt{2}} = \frac{1}{\sqrt{2}}$$

$$EF = \sqrt{10} \quad AF = 3\sqrt{2}$$

$$\frac{EF}{AF} = \frac{\sqrt{10}}{3\sqrt{2}} = \frac{\sqrt{5}}{3}$$

$$AH = \sqrt{3 \times 14} = 7 \quad (2)$$

$$AC = \sqrt{3 \times 10} = 3\sqrt{10}$$

$$ADE \sim ABC \quad (3)$$

$$AB = \sqrt{14 \times 10} = 14\sqrt{10}$$

$$\frac{4}{x+1} = \frac{x}{10} \quad x^2 + x = 40$$

$$x^2 + x - 40 = 0$$

$$(x+4)(x-10) = 0 \quad \begin{cases} x = -4 \\ x = 10 \end{cases}$$

$$x = 10 \quad \checkmark$$

$$ABF \sim EFC$$

$$\frac{4}{EF} = \frac{14+EF}{14}$$

$$EF = x \rightarrow 14x + x^2 = 14 \times 14$$

$$x^2 + 14x - 14 \times 14 = 0 \quad (x-14)(x+14) = 0$$

$$\begin{cases} x = 14 \\ x = -14 \end{cases}$$

$$x = -14 \quad \checkmark \checkmark \checkmark$$

s.a.m

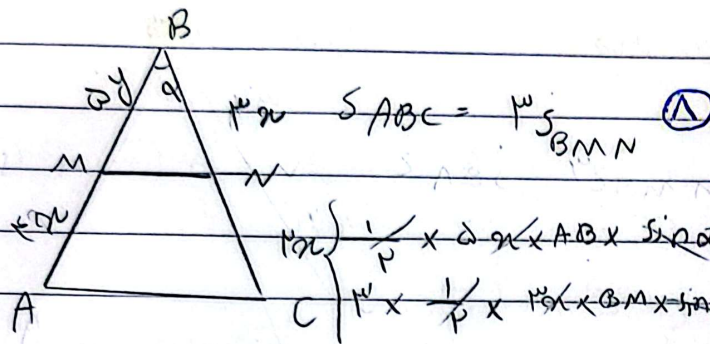
$$DE = m \quad x = \frac{3}{5} y \quad (4)$$

$$DEH \sim FHC \rightarrow \frac{K}{3} = \frac{3}{5}$$

$$\frac{K}{3} = \frac{3}{5}$$

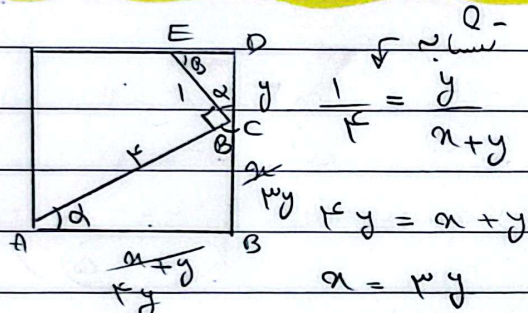
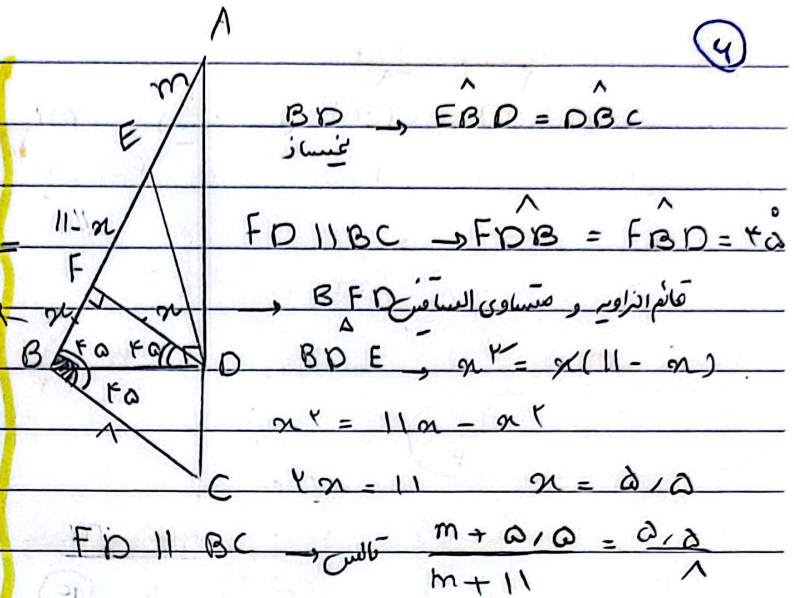
$$ADE \sim ABC$$

$$\frac{K}{1.28} = \frac{x}{1.28} \quad \frac{1}{3}$$



$$S_{AB} = 9 S_{BM}$$

$$\frac{AB}{BM} = \frac{9}{1} \rightarrow \frac{BM}{AM} = \frac{1}{8}$$

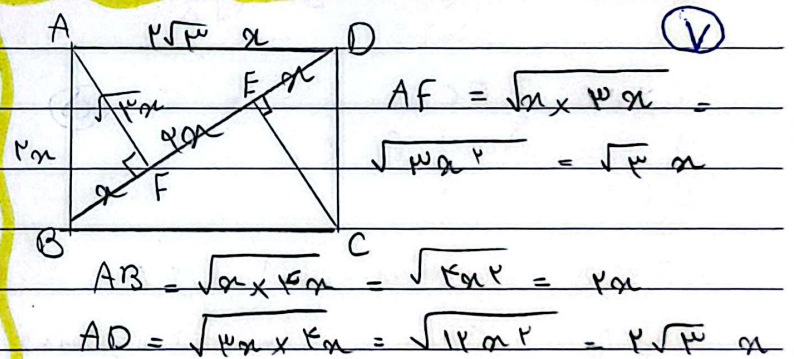


$$2y = x \quad y = \frac{x}{2} = 0.5$$

$$S_{ABCD} = xy = 1 \times 1 = 1$$

$$1m + 11 = 2.75m + 4.75$$

$$m = 4.75 \rightarrow AF$$



$$\frac{S_{ABCD}}{S_{ABF}} = \frac{10 \times 10x \times 10x}{\frac{1}{2} \times 10x \times 10x} = 1$$

s.a.m

$$\begin{aligned} & \text{Q. 9} \\ & \text{Ass } ABC \rightarrow BD \text{ is} \\ & BG = 4 \times GD \end{aligned}$$

(10)

$$\begin{aligned} & \text{Q. 9} \\ & \text{Ass } AGC \rightarrow GD \text{ is} \\ & GF = 4 \times FD \\ & \frac{FD}{GD} = \frac{1}{4} \rightarrow GD = \frac{1}{4} BD \\ & BD \rightarrow 4GD = (9) \\ & FD \rightarrow \frac{1}{4} GD \end{aligned}$$