

باز هم دقت

دقت

19, 10

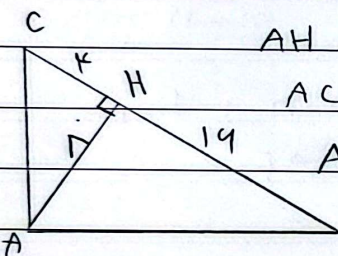
دقت

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

$$DEH \sim FHC \rightarrow \frac{m}{3m-3} = \frac{4}{3}, AE = 1, BE = \sqrt{9+1} = \sqrt{10}$$

$$3m = 9m - 9, 3m = 9, m = 3, (AD) = 3, AEF \sim BFC, \text{نسبت} = k, EF = \sqrt{10}, AF = 3\sqrt{2}, \frac{EF}{AF} = \frac{\sqrt{10}}{3\sqrt{2}} = \frac{\sqrt{5}}{3}$$

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



$$AH = \sqrt{4 \times 14} = 11, AC = \sqrt{4 \times 14} = 11\sqrt{2}, AB = \sqrt{14 \times 4} = 2\sqrt{14}, ADE \sim ABC, \frac{4}{11} = \frac{x}{14}, x^2 + x = 3, x^2 + x - 3 = 0, (x+4)(x-3) = 0, \begin{cases} x = -4 \\ x = 3 \end{cases}$$

$$ABF \sim EFC, \frac{4}{EF} = \frac{11+EF}{11}, 1, 10$$

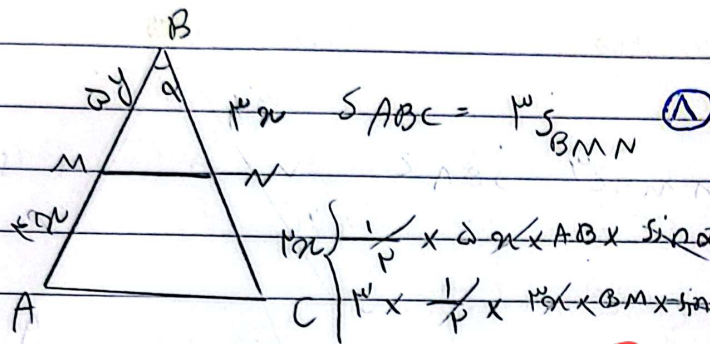
$$EF = x \rightarrow 11x + x^2 = 11, x^2 + 11x - 11 = 0, (x-1)(x+12) = 0, \begin{cases} x = 1 \\ x = -12 \end{cases}$$

$$\begin{cases} x = 1 = EF \\ x = -12 \end{cases}$$

s.a.m

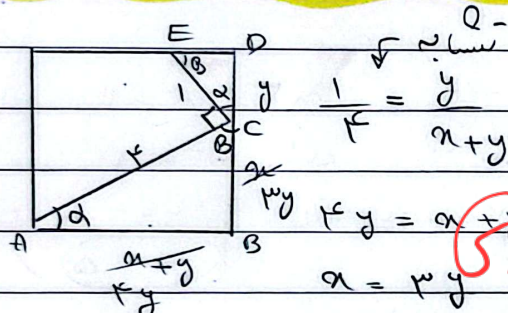
$$AF = AE + EF = 1 + 1 = 2$$

$$DE = m, x = \frac{3}{2}y, DEH \sim FHC, \frac{K}{3} = \frac{3}{3}, ADE \sim ABC, \frac{K}{1.28} = \frac{x}{1.28}, \frac{1}{3}$$



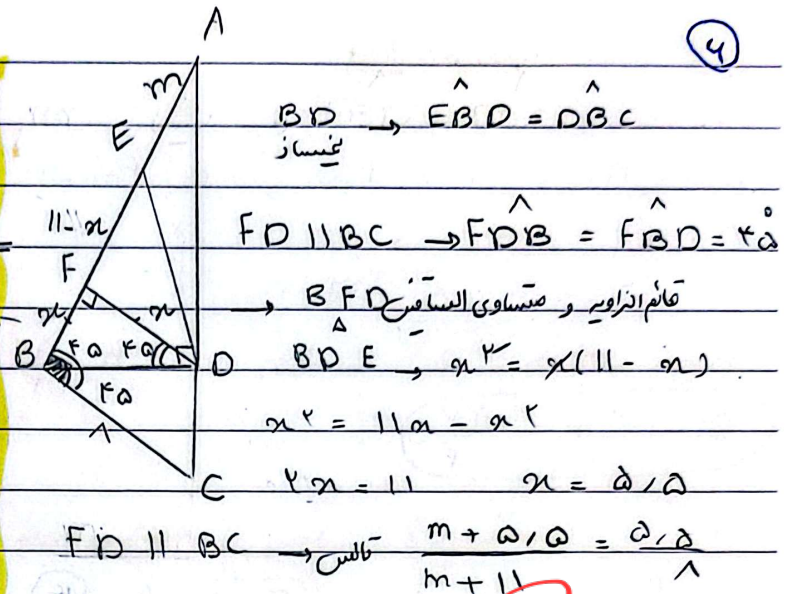
$$S_{AB} = 9 S_{BM}$$

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



$$xy = x + y$$

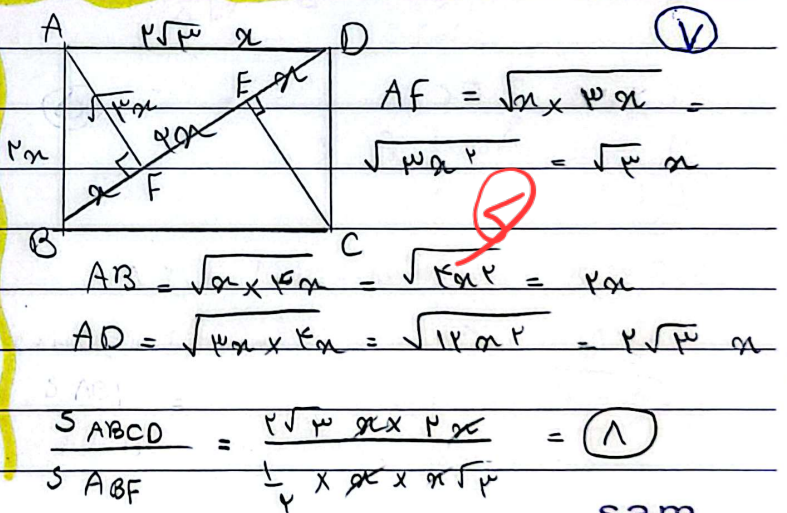
$$S = (x+y) \cdot r = 10 \cdot 4 = 40$$



$$11m + 55 = 5.5m + 60.5$$

$m = 1$

AF



s.a.m

