

17, 25

کلی جزان حذف 17

نمود: $\sqrt{(k-1)^2 + (\frac{m-k}{x})^2} = \sqrt{k^2 - 2k + 1 + \frac{(m-k)^2}{x^2}}$ (2) $= 1$
 $\rightarrow a = \frac{m-k}{x} = \frac{-1}{x} \rightarrow m-k = -x$ ✓

2- جمع فرکانس های ورودی و خروجی برابر است.

$-1 + x = 1 - x \rightarrow x = 1$ (2)

$AD \perp AB \rightarrow \frac{m_{AD}}{m_{AB}} = -1 \rightarrow \frac{k-y}{-1+1+x} = \frac{x}{x} \rightarrow y = -1$

$AB = \sqrt{(k-1)^2 + (-1-x)^2} = 1$ ✓

$BC = \sqrt{(\frac{m-k}{x})^2 + (1-k-1)^2} = \frac{1}{x}$ ✓

$P = (1 + \frac{1}{x}) \times 1 = 1$ ✓

$\tan \alpha = a \rightarrow \tan \alpha = \frac{-2m}{m^2-1} = \sqrt{3}$ (2)

$\rightarrow \sqrt{3}m^2 - \sqrt{3} = 2m \rightarrow \sqrt{3}m^2 - 2m - \sqrt{3} = 0$

$\rightarrow m^2 + 2m - 1 = 0 \rightarrow (m+1)(m-1) \rightarrow m = -1, m = 1$

$|\frac{-1}{\sqrt{3}} - \frac{1}{\sqrt{3}}| = \frac{2}{\sqrt{3}}$ ✓

$$\text{نقطه } B: \frac{dy}{dx} = \frac{\Delta}{K} = 1 \rightarrow y = x + b$$

(۲)

$$\rightarrow 3 = 1(3) + b \rightarrow b = -2 \rightarrow y = x - 2$$

$$\text{نقطه } A: -\frac{1}{2} \rightarrow y = -\frac{1}{2}x + b' \rightarrow 9 = -\frac{1}{2}(-1) + b' \rightarrow b' = \frac{19}{2}$$

$$\rightarrow y = -\frac{1}{2}x + \frac{19}{2} \rightarrow \text{فاصله: } (-\frac{1}{2}x + \frac{19}{2} - (x - 2)) \times 2$$

$$\rightarrow -x + 19 - 2x + 4 \rightarrow 4x = 23 \rightarrow x = \frac{23}{4} \rightarrow y = \frac{17}{4}$$

$$\text{فاصله } A, B: \sqrt{(1-0)^2 + (9-1)^2} = \sqrt{20}$$

$$\begin{cases} x_1, y_1 \\ x_2, y_2 \end{cases}$$

$$\begin{cases} x_1 = 0 \\ y_1 = 19 \end{cases}$$

(۲)

$$11x = 23 \rightarrow x = \frac{23}{11} \rightarrow y = 1 \rightarrow B \left(\frac{23}{11}, 1 \right)$$

$$\text{فاصله } A, B: \frac{|1 - 9 - 11|}{\sqrt{1+1}} = \frac{21}{\sqrt{2}} \rightarrow \text{طول فاصله } A, B$$

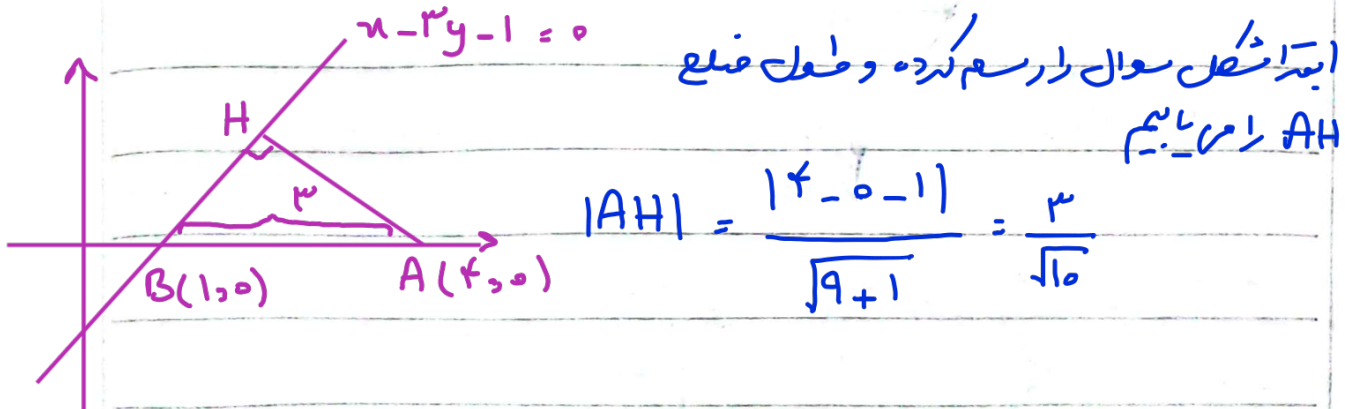
$$a \neq \frac{1}{a} \rightarrow a^2 \neq 1 \rightarrow a \neq \pm 1$$

✓ - (2)

$$a \neq 1 \rightarrow \begin{cases} y_5 = x+1 \\ y_5 = x \end{cases} \quad \left| \quad a_5 = -1 \rightarrow \begin{cases} y_5 = -x+1 \\ y_5 = -x+2 \end{cases}$$

$$\text{فاصله} = \frac{|1|}{\sqrt{2}} \cdot \frac{\sqrt{2}}{2} \rightarrow \text{ضلع} = \sqrt{2} - \frac{1}{2} = \frac{\sqrt{2}}{2}$$

$$\rightarrow \left(\frac{\sqrt{2}}{2} \times \frac{\sqrt{2}}{2} \right) = \frac{1}{2} \quad \checkmark$$



$$\frac{9}{10} (AH)^2 + (BH)^2 = (AB)^2 \rightarrow BH = \frac{9}{\sqrt{10}}$$

$$S_D = \frac{9}{\sqrt{10}} \times \frac{3}{\sqrt{10}} \times \frac{1}{2} = \frac{27}{20} = 1.35$$

$$\sqrt{3} \frac{b-a}{-\frac{1}{3} + \frac{1}{4}} \rightarrow b-a \frac{\sqrt{3}}{4}$$

(2) - 9

نتیجه: $\sqrt{\left(\frac{-\frac{1}{3} + \frac{1}{4}}{\frac{1}{34}}\right)^2 + (a-b)^2} = \frac{4}{4} \rightarrow \text{خط} = \frac{\sqrt{2}}{3}$ ✓

شیب خط: $\frac{\Delta y}{\Delta x} = \frac{-4-0}{-3-0} = \frac{4}{3} \rightarrow \text{خط} = \frac{4}{3}$ - 10

خط L: $y = \frac{4}{3}x + b \rightarrow -4 = \frac{4}{3}(-3) + b$ (1, 25)

$\rightarrow b = -\frac{24}{3} \rightarrow y = \frac{4}{3}x - \frac{24}{3}$ ✓

طول خط = 4 $\rightarrow 4 = \frac{|b'|}{3} \rightarrow |b'| = \frac{12}{3}$ **دقت!**
 $\sqrt{1 + \frac{16}{9}} = \frac{5}{3}$ **ثیب این خط $\frac{4}{3}$ است!**
 $b' = \frac{12}{3} \rightarrow \text{خط نهایی}$

خط مورد نیاز $y = \frac{4}{3}x + \frac{12}{3}$

$\begin{cases} y = \frac{4}{3}x + \frac{12}{3} \\ y = -\frac{3}{4}x - \frac{24}{4} \end{cases} \rightarrow x = 9 \rightarrow y = 12 \rightarrow x \cdot y = 108$ **خط نهایی** xy = 108