

شماره اولی ۱۷,۷۵

$$A \times B - B^T \rightarrow \{(1,2)(1,3)(2,2)(2,3)(3,2)(3,3)\} - \{(1,1)(1,3)(3,1)(3,3)\} = \{(1,2)(1,3)\}$$

$$(1, m^r)(1, m+r)$$

$$m^r = m+r \rightarrow m^r - m - r = 0 \rightarrow (m-r)(m+1) = 0 \rightarrow m=r \quad \boxed{m=-1}$$

غیر قابل قبول

$$(1, 4)(1, 1) \times$$

$$(1, 1)(1, 4) \times \quad (-1, 4)(-1, 3) \times$$

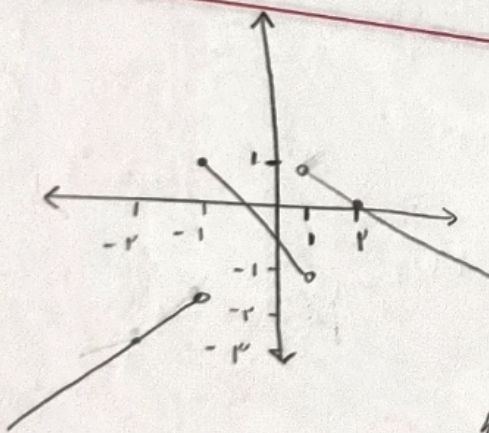
غیر قابل قبول

$$1-1 = a+b \rightarrow a+b=0 \rightarrow -a+b=0$$

$$2a+b=1 \rightarrow 2a+b=1 \rightarrow \underline{2a+b=1} \rightarrow a \times b, -1 \times 1 = \boxed{-44}$$

$a=1, b=-1$

$$2k-3 = 1-3k = \omega k = v \rightarrow k = \frac{v}{\omega} \rightarrow k = \frac{v}{\omega}$$



$$\begin{aligned} -k+2 &\rightarrow k=1 \rightarrow -1+2=1 \\ -k+2 &\rightarrow k=2 \rightarrow -2+2=0 \\ -k &\rightarrow k=1 \rightarrow -1 \\ -k &\rightarrow k=-1 \rightarrow 1 \\ k-1 &\rightarrow k=1 \rightarrow 1-1=0 \\ k-1 &\rightarrow k=-2 \rightarrow -2-1=-3 \end{aligned}$$

$$D_f = \mathbb{R} - \{1\}$$

$$R_f = (-\infty, 1]$$

ا) $2y^k + k^2 = 0 \rightarrow k^2 = -2y^k$

ب) $(k-1)^2 = (y-1)^2 \rightarrow k=1, y=1$

الف) $x \sin y = y \sin x \rightarrow x=0 \rightarrow x \sin y = 0 \rightarrow \sin y = 0 \rightarrow y = k\pi$ تابع نیست

ب) $\sqrt{\frac{x}{y}} + \sqrt{\frac{y}{x}} = 2 \rightarrow \sqrt{\frac{x}{y}} = 1 \rightarrow x=y \rightarrow y \neq 0 \rightarrow x=y$ تابع نیست

الف) $y = \sqrt{\frac{x-1}{x-2}} + \sqrt{\frac{x-2}{x-1}}$ (1,50)

$\frac{1}{x-2} - \frac{1}{x-1} + \frac{1}{x-1} - \frac{1}{x-2} = 0$

$\frac{x-1}{x-2} \geq 0 \rightarrow x \geq 1 \rightarrow D_f = [1, +\infty)$

$\frac{x-2}{x-1} \geq 0 \rightarrow x \leq 2 \rightarrow D_f = (-\infty, 2]$

$D_f = [1, 2]$

ب) $\sqrt{x} + \sqrt{y-1} = \sqrt{3} \rightarrow \sqrt{y-1} = \sqrt{3} - \sqrt{x} \rightarrow y-1 = 3 + x - 2\sqrt{3x} \rightarrow y = 4 + x - 2\sqrt{3x}$

$x \geq 0 \rightarrow y \geq 0 \rightarrow D_f = [0, +\infty)$

$\sqrt{x} = \sqrt{3x} \rightarrow x=0$

الف) $y = \frac{\sqrt{x^2-4x+4}}{\sqrt{x^2-1x+1}}$ (1,8)

$y = \frac{\sqrt{(x-2)^2}}{\sqrt{(x-1/2)^2 + 3/4}}$

$|x-2| \geq 0$

$|x-1/2| \geq 0$

$D_f = (-\infty, 1] \cup [2, +\infty)$

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ب) $y = \frac{\sqrt{(x-1)(x-\frac{1}{2})}}{\sqrt{(x-1)(x-\frac{1}{2})}}$ (1,8)

$D_f = (-\infty, 1] \cup [2, +\infty)$