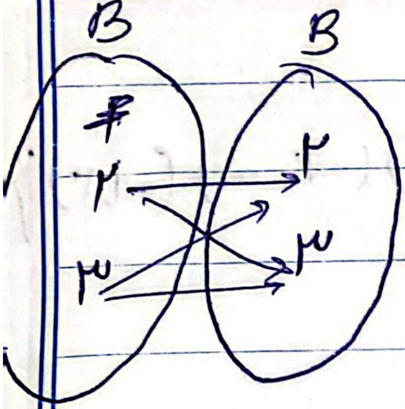
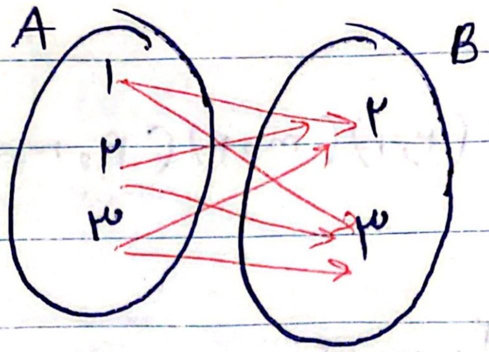




$A \times B = \{(۱,۲)(۱,۳)\cancel{(۲,۲)}\cancel{(۲,۳)}\cancel{(۳,۲)}\cancel{(۳,۳)}\}$

$B \times B = \{\cancel{(۲,۲)}\cancel{(۲,۳)}\cancel{(۳,۲)}\cancel{(۳,۳)}\}$

$A - B = \{(۱,۲)\ (۱,۳)\}$

$m^۲ = m + ۲$

$m^۲ - m - ۲ = ۰$

$(m-۲)(m+۱) \begin{cases} m = ۲ \\ m = -۱ \end{cases}$ ق ق

$\{(۳,m^۲),(۲,۱)(-۳,m),(-۲,m)(۳,m+۲)\ (m,۴)\}$

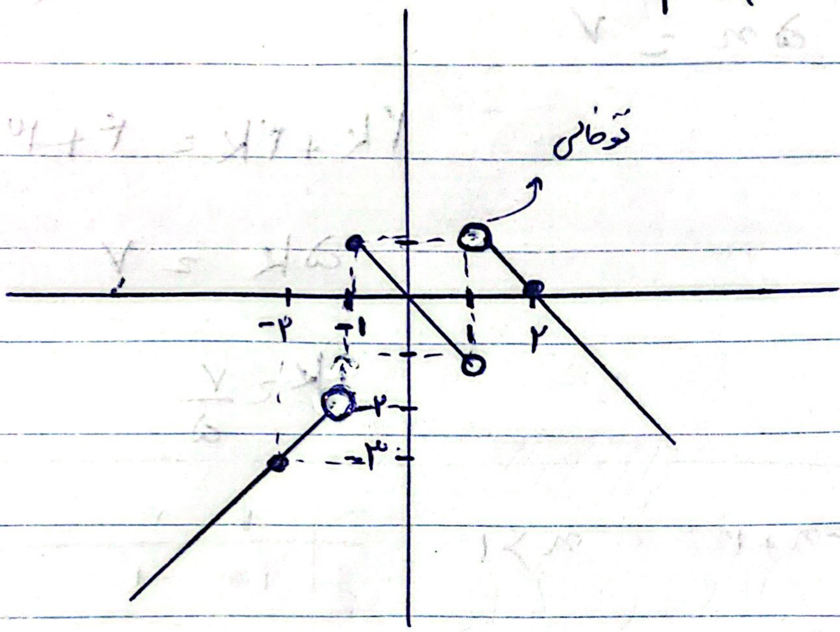
if ۲ $\rightarrow \{(۳,۴)\ (۲,۱)\ (-۳,۲)\ (-۲,۲),(۳,۴)$ ...

$$f(x)\begin{cases} -x+2 & ; \ x>1 \\ -x & ; \ -1\leq x<1 \\ x-1 & ; \ x<-1 \end{cases}$$

x	1	2
	1	0

x	-1	1
y	1	-1

	-1	-2
	-2	-3



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6 -

$$2y^3+x^2+1=0$$

تابع است

$$2y_1^3=-1-x^2$$

$$2y_2^3=-1-x^2$$

$$\cancel{2}y_1^3=\cancel{2}y_2^3$$

$$y_1^3=y_2^3 \rightarrow y_1=y_2 \checkmark$$

date:.. Sub:..

x	$-\infty$		1		2		6		8		$+\infty$
x^2-7x+6		$+$	0	$-$		$-$	0	$+$		$+$	
$x^2-10x+16$		$+$		$+$	0	$-$		$-$	0	$+$	
		$+$	0	$-$	$\nexists$	$+$	0	$-$	$\nexists$	$+$	

$$(-\infty, 1) \cup (2, 6] \cup (8, +\infty)$$

$(x-6)(x-1)$ (... x

$$\frac{x^2-7x+6}{x-10x+16} \geq 0$$

	$-\infty$		1		$\frac{16}{9}$		6		$+\infty$
x^2-7x+6		$+$	0	$-$		$-$	0	$+$	
$x-10x+16$ $-9x+16$		$+$		$+$	0	$-$		$-$	
		$+$		$-$	$\nexists$	$+$		$-$	

$x-10x+16=0$

$-9x+16=0$

$16-9x=0$

$16=9x$

$\frac{16}{9}=x$

$$(-\infty, 1] \cup \left(\frac{16}{9}, 6\right]$$

۴-

$$f(x)=\begin{cases} ۲x-۳ , & x \geq k \\ ۴-۳x , & x \leq k \end{cases}$$

$x=k$

$۲k-۳ = ۴-۳k$

$۲k+۳k = ۴+۳$

$۵k = ۷$

$k=\frac{۷}{۵}$

$$\sqrt{\frac{x-1}{x-3}} + \sqrt{\frac{2-x}{x}}$$

$x=1$ $x=2$

$\frac{x-1}{x-3} \geqslant 0$ $\frac{2-x}{x} \geqslant 0$

$x=3$ $x=0$

	$-\infty$	0	1	2	3	$+\infty$
$x-1$	$-$	$-$	$+$	$+$	$+$	
$x-3$	$-$	$-$	$-$	$-$	$+$	
$2-x$	$-$	$-$	$-$	$+$	$+$	
x	$-$	$+$	$+$	$+$	$+$	
	$+$			$-$	$+$	

$D_f \quad [1,2] \cup (3,+\infty)$

$$\frac{\sqrt{x^2-7x+6}}{\sqrt{x-10x+16}} \qquad \sqrt{\frac{x^2-7x+6}{x-10x+16}} \qquad x^2-7x+6=0$$

$(x-6)(x-$

$x-10x+16$ $\qquad \frac{x^2-7x+6}{x-10x+16} \geqslant 0$

$(x-8)(x-2) \lt \begin{matrix} 8 \\ 2 \end{matrix}$

date: .... Sub: ....

$g(x)=\{(۳,m^۲)(۲,۱)(m,۴)(۳,m+۲)(-۲,m)(-۱,۳)\}$

$m^۲=\underline{m+۲}$

$m^۲-m-۲=0$ — $m=۲$ قق / $m=۱$

$(m-۲)(m+۱)$

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۳ -

$x^۲-۱=ax+b$

$(۱)^۲-۱=a+b$

$0=a+b$

$a=-b$

$-bx+b=$

a

$-۲b+b=۸$

$-b=۸$

$\underbrace{b=-۸}$

$\{۸x-۸=۶۴$

$\underline{a=۸}$

$$x^۲+۴y^۲-۲x-۱۲y+۱۰=۰ \longrightarrow x=۰$$

$$۴y^۲-۱۲y+۱۰=۰$$

$$x\sin y = y\sin x$$

$$۳۰ \times \sin ۶۰ = ۶۰ \times \sin ۳۰$$

$$۱۵\ \cancel{۳۰} \times \frac{\sqrt{۳}}{\cancel{۲}} = \overset{۳۰}{\cancel{۶۰}} \times \frac{۱}{\cancel{۲}}$$

$$۱۵\sqrt{۳} \neq ۳۰$$

$$\sqrt{\frac{x^۲+y^۲}{xy}} = ۲$$

$$\sqrt{\frac{2x^2-5x+3}{3x^2-7x+4}}$$

$$\frac{2x^2-5x+3}{3x^2-7x+4} \geq 0$$

$$3x^2-5x+2 \geq 0$$

$$\frac{5 \pm 1}{2 \times 2} \left\langle \begin{matrix} \frac{3}{2} \\ 1 \end{matrix} \right. \longrightarrow \frac{3}{2} \leq x \leq 1$$

$$\frac{7 \pm 1}{6} \left\langle \begin{matrix} 1 \\ \frac{4}{3} \end{matrix} \right.$$

$$D = (-\infty, 1) \cup \left[\frac{3}{2}, +\infty\right)$$

$$3x^2-7x+4=0$$

$$\Delta = (-7)^2 - 4(3)(4) = 1$$ مخرج

$$\frac{7 \pm 1}{6} \left\langle \begin{matrix} 1 \\ \frac{4}{3} \end{matrix} \right. \longrightarrow \frac{4}{3} < x < 1$$

$$2x^2-5x+3 \geq 0 \longrightarrow 2x^2-5x+3=0$$

$$\Delta = (-5)^2 - 4(2)(3) = 1$$

$$\cancel{\frac{2x-3}{3x-4} \geq 0}$$

$$\frac{2x^2-5x+3}{3x^2-7x+4} \geq 0 \longrightarrow 3x^2-7x+4 \neq 0$$

$$\frac{(2x-3)(x-1)}{(3x-4)(x-1)}$$

$$D = (-\infty, 1) \cup \left(1, \frac{4}{3}\right) \cup \left[\frac{3}{2}, +\infty\right)$$