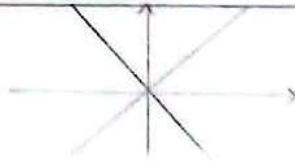


$$x^2 - 4x + 4 = 0 \Rightarrow (x-1)(x-4) = 0 \Rightarrow x_1 = 1, x_2 = 4$$

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الف) $|y| = |x|$



ب) $y = x^2$

الف) $|y| + \sqrt{x-1} = 0$



جمع دو مقدار منفی برابر صفر نیست!
 $|y| = 0 \Rightarrow y = 0$
 $\sqrt{x-1} = 0 \Rightarrow x = 1$

ب) $x = 1$

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الف) $|y-1| = \sqrt{x-2} \xrightarrow{x=2} y = 0, 2$

ب) $y^2 - y = \frac{x^2}{2} \xrightarrow{x=0} y = \pm 1, 0$

ج) $\sin^2 x + \cos^2 \frac{y}{2} = 1 \xrightarrow{x=0} \sin 0 = 0 \Rightarrow \cos^2 \frac{y}{2} = 1 \Rightarrow \cos \frac{y}{2} = \pm 1 \Rightarrow y = 0, \pm 2\pi$

د) $2xy = x \xrightarrow{x=0} y = 0$
 برای هر $x \neq 0$ داریم $y = \frac{1}{2}$

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الف) $x^2 + |y-1| = 2x \xrightarrow{x=1} y = 0, 2$

ب) $y = x^2 - 2$

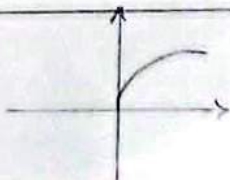
الف) $y^2 + 3x = 0$

$y^2 = -3x \Rightarrow y = \pm \sqrt{-3x}$

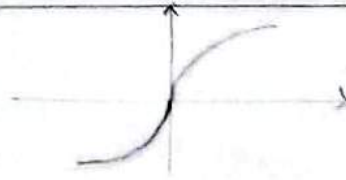
ب) $x = -\frac{y^2}{3}$

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الف)



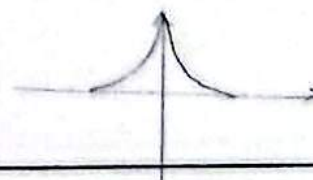
ب)



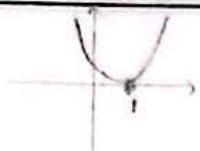
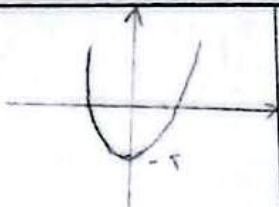
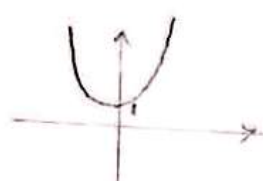
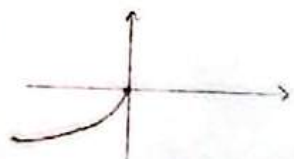
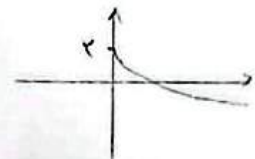
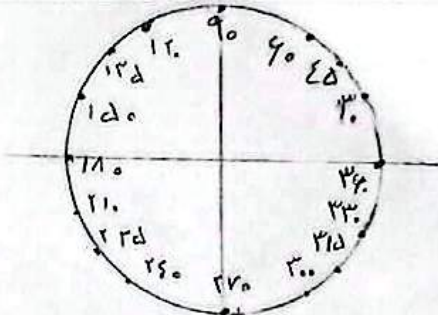
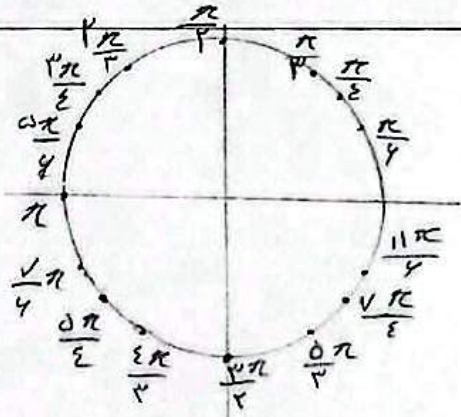
ج)



د)



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الف  ب  ج  د 	٦
الف  ب  ج  د 	٧
	٨
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الف) $-\frac{1}{2}$ ب) $\frac{1}{2}$ ج) $\frac{1}{2}$ د) $-\frac{1}{2}$	١٠