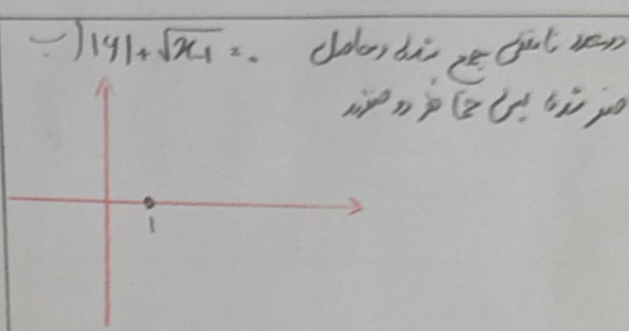
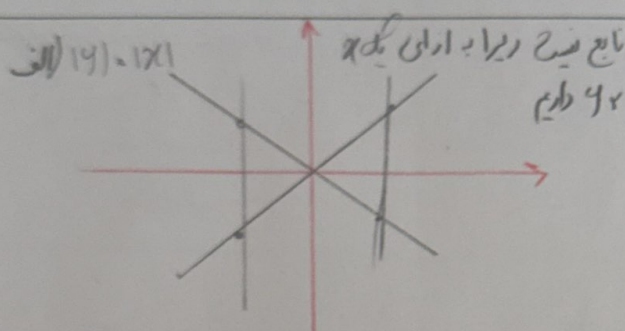


if $x_1 = x_2 \Rightarrow y_1 = y_2 \rightarrow 1=1 \Rightarrow 4\alpha = \alpha^2 + 3 \Rightarrow \alpha^2 - 4\alpha + 3 = 0 \Rightarrow (\alpha-1)(\alpha-3) \Rightarrow \alpha = \begin{pmatrix} 1 \\ 3 \end{pmatrix}$

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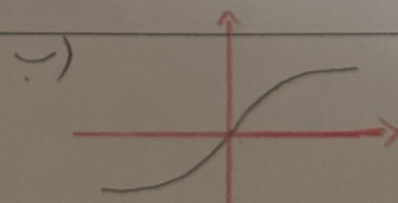
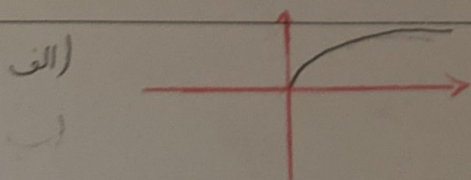
برای این یک x در y داریم $y-1=1 \Rightarrow y=2$
پس تابع نیست
ب) $y^6 - y = \frac{x^2}{2} \xrightarrow{x=0} y^6 - y = 0 \Rightarrow y(y^5 - 1) = 0 \Rightarrow y = 0$
پس تابع نیست
ج) $\sin x^2 + \cos^2 \frac{y}{2} - 1 \xrightarrow{x=0} \cos^2 \frac{y}{2} = 0 \Rightarrow \frac{y}{2} = \frac{\pi}{2} \Rightarrow y = \pi$
د) $2x^2 = x \xrightarrow{x=0} 2(-1)^2 = 0 \Rightarrow 0 = 0 \Rightarrow y = 0$
برای $x=0$ بی شمار مقدار y دارد

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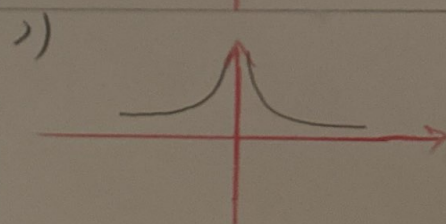
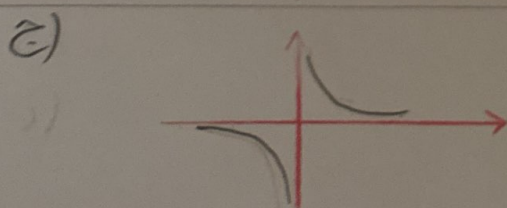
برای این یک x در y داریم $y-1=3 \Rightarrow y=4$
داریم پس تابع نیست
الف) $x^2 + |y-1| = 2x \xrightarrow{x=1} 1 + |y-1| = 2 \Rightarrow |y-1| = 1 \Rightarrow y = 2$
ب) $-y+1=3 \Rightarrow y=-2$
جست

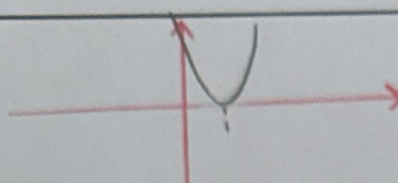
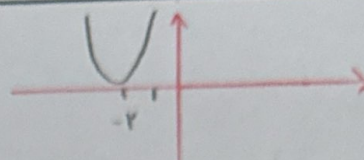
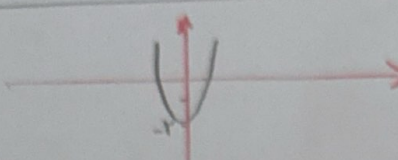
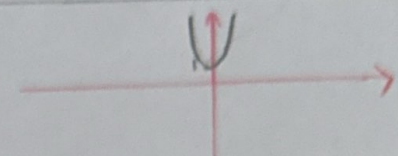
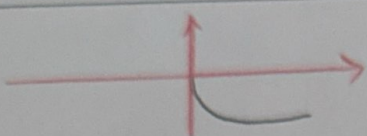
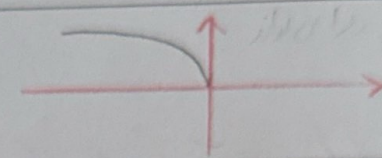
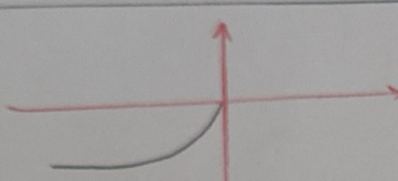
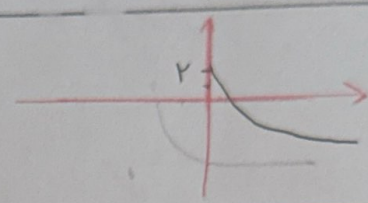
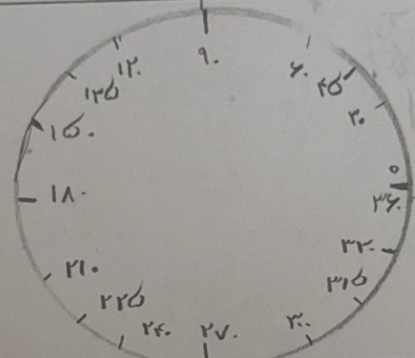
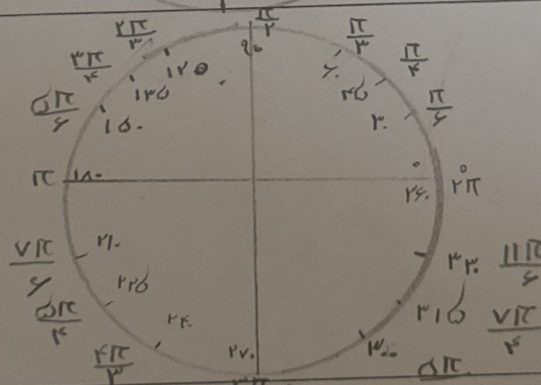
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تابع است
ب) $y^6 + 3x = 0 \Rightarrow \begin{cases} y_1^6 = -3x_1 \\ y_2^6 = -3x_2 \end{cases} \xrightarrow{x_1=x_2} y_1^6 = y_2^6 \Rightarrow y_1 = y_2$



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الف)		ب)		٦
ج)		د)		
هـ)		و)		٧
ز)		ح)		
				٨
				
الف) $-\frac{1}{2}$	ب) $\frac{1}{2}$			٩
هـ) $\frac{1}{2}$	و) $-\frac{1}{2}$			
ج) $\frac{1}{2}$	د) $-\frac{1}{2}$			١٠
ز) $\frac{1}{2}$	ح) $\frac{1}{2}$			
$\frac{6\pi}{3} \Rightarrow 120^\circ \Rightarrow \cos 120^\circ = -\frac{1}{2}$				١١
$\frac{11\pi}{6} \Rightarrow 330^\circ \Rightarrow \cos 330^\circ = \frac{\sqrt{3}}{2}$				