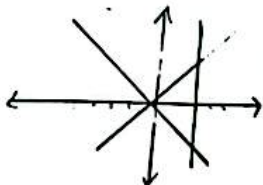


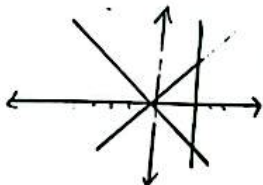
الف) $I = \{(1, 3a), (1, a^2 + 3), (2, 3a)\}$ $\xrightarrow{\text{بج}}$ $3a = a^2 + 3 \rightarrow a^2 - 3a + 3 = 0 \Rightarrow a + b + c = 0$

$a = 1, a = c, a = 3$

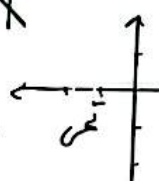
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الف) $|y| = |x| \rightarrow$ ۵ 



تایم نمودار آن را در چند نقطه مشخص کنند

ب) $|y| + \sqrt{x-1} = 0 \rightarrow |y| = -\sqrt{x-1} \rightarrow$  ۵
 تایم نمودار آن را در چند نقطه مشخص کنند
 از زیر دایره (مستطیل) جهت آن علامت مشخص
 قدر مطلق یک عدد نمی تواند منفی باشد

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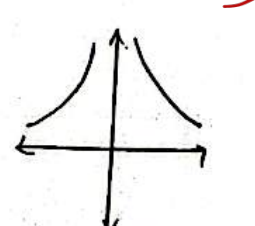
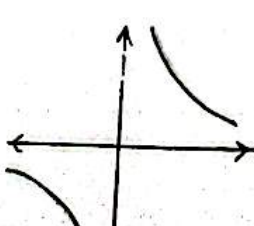
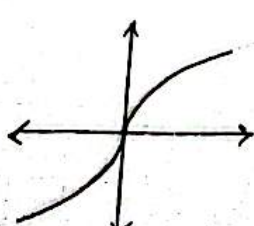
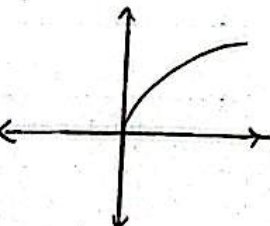
الف) $|y-1| = \sqrt{x-2} \xrightarrow{x=3} |y-1| = \sqrt{3-2} \rightarrow |y-1| = 1 \Rightarrow y-1=1 \rightarrow y=2$
 تایم نیست
 $y-1=-1 \rightarrow y=0$
 ب) $y^3 - y = x^2/2 \xrightarrow{x=0} y^3 - y = 0 \rightarrow y(y^2 - 1) = 0 \rightarrow y=0, y=1, y=-1$
 تایم نیست
 ج) $\sin^2 x + \cos^2 y = 1 \xrightarrow{x=\pi/2} 1 + \cos^2 y = 1 \rightarrow \cos^2 y = 0 \rightarrow y=\pi, y=2\pi$
 د) $2xy = x \xrightarrow{x=0} 0 = 0 \rightarrow$ مرتبای از y پاسخ خواست ۵

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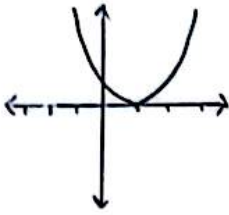
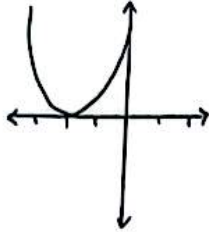
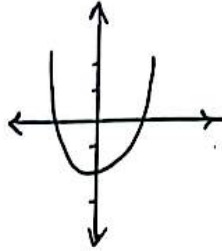
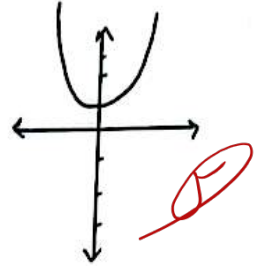
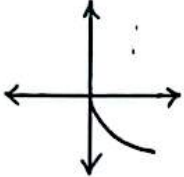
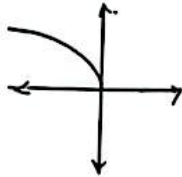
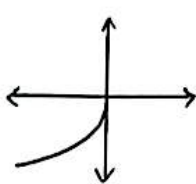
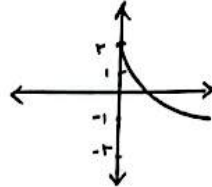
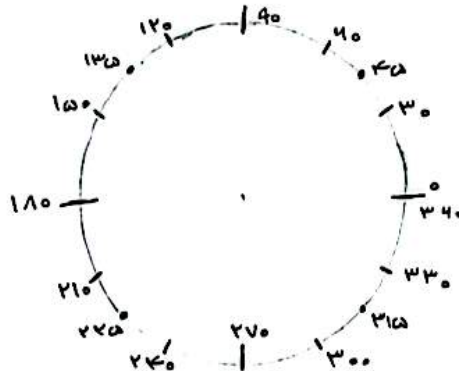
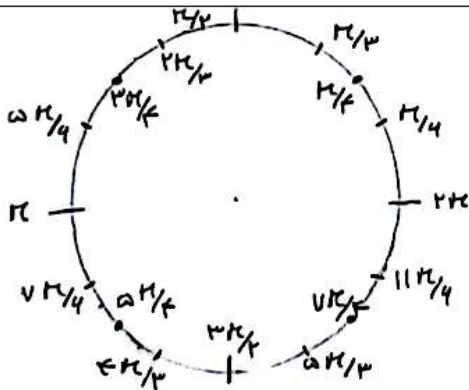
الف) $x^2 + |y-1| = 4x \xrightarrow{\text{مثال نقیض}} x=2 \rightarrow 4 + |y-1| = 8 \rightarrow |y-1| = 4 \rightarrow y=-3$
 $y=5$
 تایم نیست
 ب) $y^3 + 3x = 0 \xrightarrow{\text{تجزیه}}$ $\begin{cases} y_1^3 + 3x_1 = 0 \\ y_2^3 + 3x_2 = 0 \end{cases} \xrightarrow{x_1=x_2} y_1^3 = y_2^3 \rightarrow y_1 = y_2$
 تایم هست ۵

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الف) $y = \sqrt{x}$ ۵
 ب) $y = \sqrt[3]{x}$
 ج) $y = 1/x^2$
 د) $y = 1/x^3$ ۵



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الف) $y = (x-1)^2$ 	ب) $y = (x+2)^2$ 	ج) $y = x^2 - 2$ 	د) $y = x^2 + 1$ 	6
الف) $y = -\sqrt{x}$ 	ب) $y = \sqrt{-x}$ 	ج) $y = -\sqrt{-x}$ 	د) $y = -\sqrt{x} + 2$ 	7
				8
				9
الف) $\cos 120^\circ = -1/2$	ب) $\sin 150^\circ = 1/2$	ج) $\cos 225^\circ = -\sqrt{2}/2$	د) $\sin 11\pi/4 = -1/2$	10