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الف) $a^2 + 3 = 4a \rightarrow a^2 - 4a + 3 = 0$ حل به روش دو ترمی $\rightarrow a = 1$ $\rightarrow \frac{a}{a} = 3$ I ✓

الف) $\frac{x}{y} = \frac{1}{-1} \Rightarrow y = x$
 $\frac{y}{x} = \frac{1}{-1} \Rightarrow y = -x$



تابع نیست

ب) $|y| + \sqrt{x-1} = 0 \Rightarrow \sqrt{x-1} = 0 \Rightarrow x=1$
 $|y| = 0 \Rightarrow y=0$
 $\Rightarrow y=0, x=1$ تابع هست

الف) $x=3 \rightarrow |y-1| = 1 \rightarrow y-1 = 1 \rightarrow y=2$
 $y-1 = -1 \rightarrow y=0$ تابع نیست!

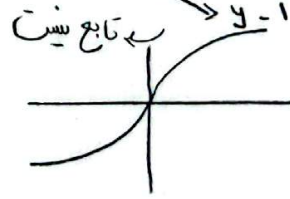
ب) $x=0 \rightarrow y^5 - y = 0 \rightarrow y(y^4 - 1) = 0 \Rightarrow y(y^2 - 1)(y^2 + 1) = 0$
 $y=0, y=1, y=-1$ تابع نیست!

ج) $x=45 \rightarrow (\frac{y}{x})^2 + \cos^2 \frac{y}{x} = 1 \rightarrow \cos^2 \frac{y}{x} = \frac{1}{x} \rightarrow \cos^2 y = 1$
 $y = \frac{\pi}{2}, y = \frac{3\pi}{2}$ تابع نیست!

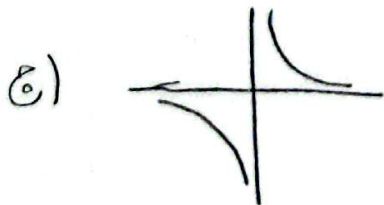
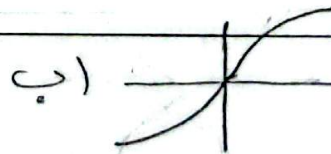
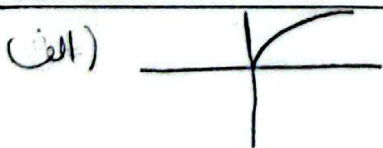
د) $2xy = x \rightarrow$ if $x=0 \rightarrow y=1$ تابع نیست!

الف) $x=1 \Rightarrow 1 + |y-1| = 4 \rightarrow |y-1| = 3 \rightarrow y-1 = 3 \rightarrow y=4$
 $y-1 = -3 \rightarrow y=-2$ تابع نیست

ب) $y^5 + 3x = 0 \Rightarrow y^5 = -3x \rightarrow y = \sqrt[5]{-3x}$



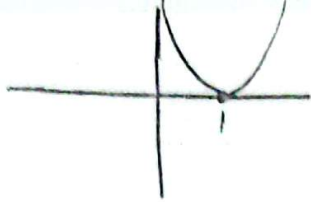
تابع هست



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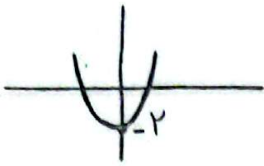


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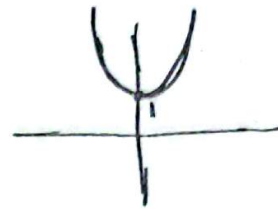
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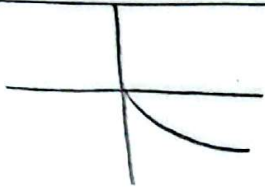
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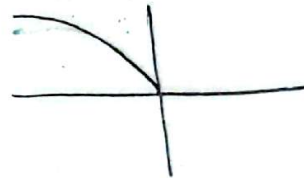
د)



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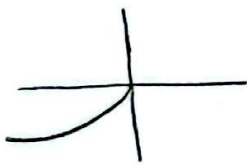


ب)



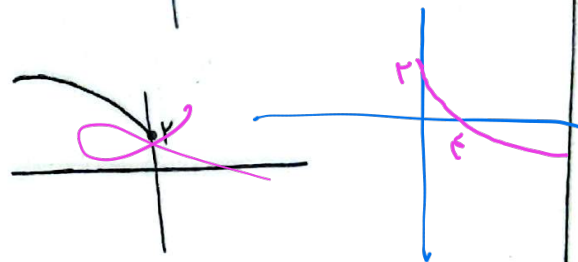
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ج)

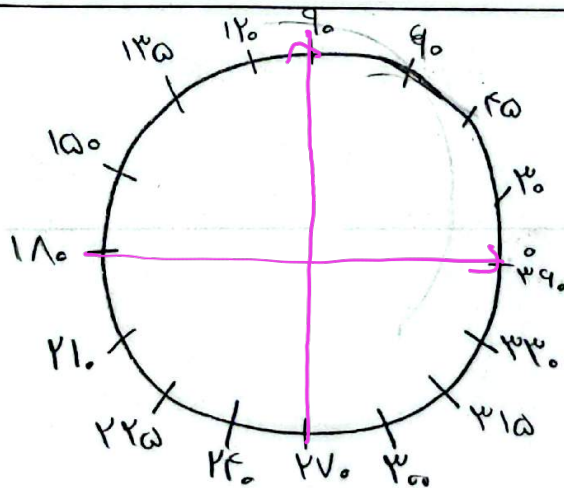


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د)



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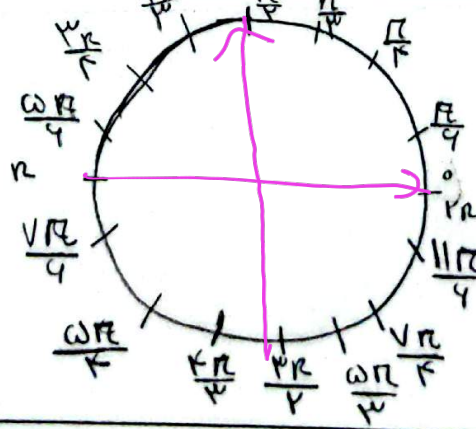


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الف) $\frac{1}{2}$

ب) $\frac{1}{2}$

ج) $\frac{1}{2}$

د) $-\frac{1}{2}$

✓ ٢

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