

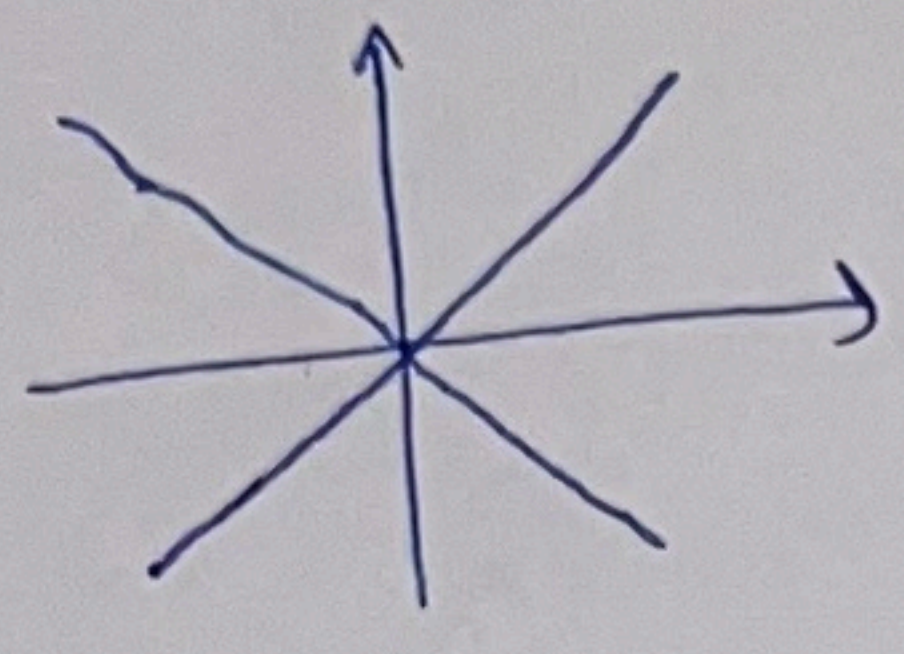
در صورت گذار
نمره شما منفر
محافظ محاسن

$f = \{(a, 2a), (1, a^2+3), (2, a)\}$

برای اینکه تابع ~~تابع~~ باشد باید در این سه نقطه هم باشد نه اینکه در این سه نقطه اول برابر بود.

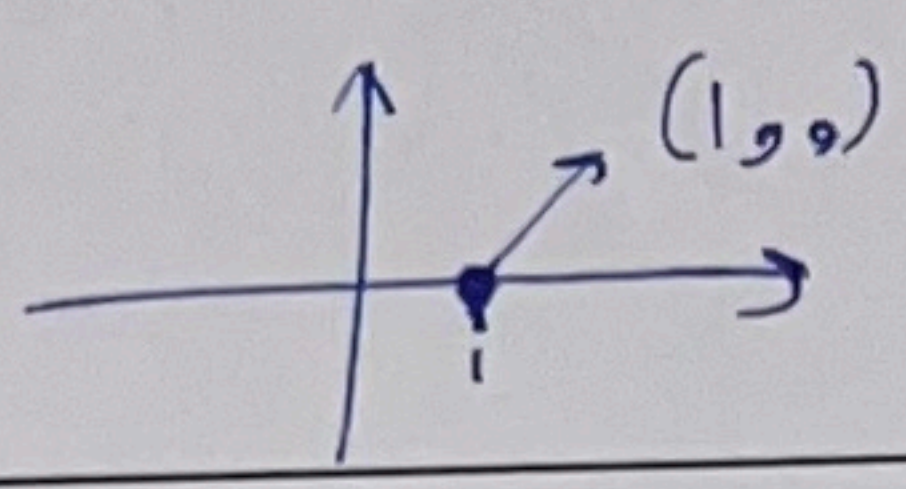
$2a = a^2 + 3 \Rightarrow a = a^2 - 2a + 3 \Rightarrow a = (a-2)(a-1)$ $a \in \{1, 2\}$ ✓

(الف)



تابع نیست

(ب) $|y| + \sqrt{n-1} = 0 \Rightarrow y=0, n=1$
 $0+0=0$



✓ $|y-1| = \sqrt{n-2} \Rightarrow n=2 \Rightarrow |y-1| = 0 \Rightarrow y=1$ تابع نیست
✓ $|y-1| = \sqrt{4} \Rightarrow |y-1| = 2 \Rightarrow y=3 \text{ یا } y=-1$ تابع نیست

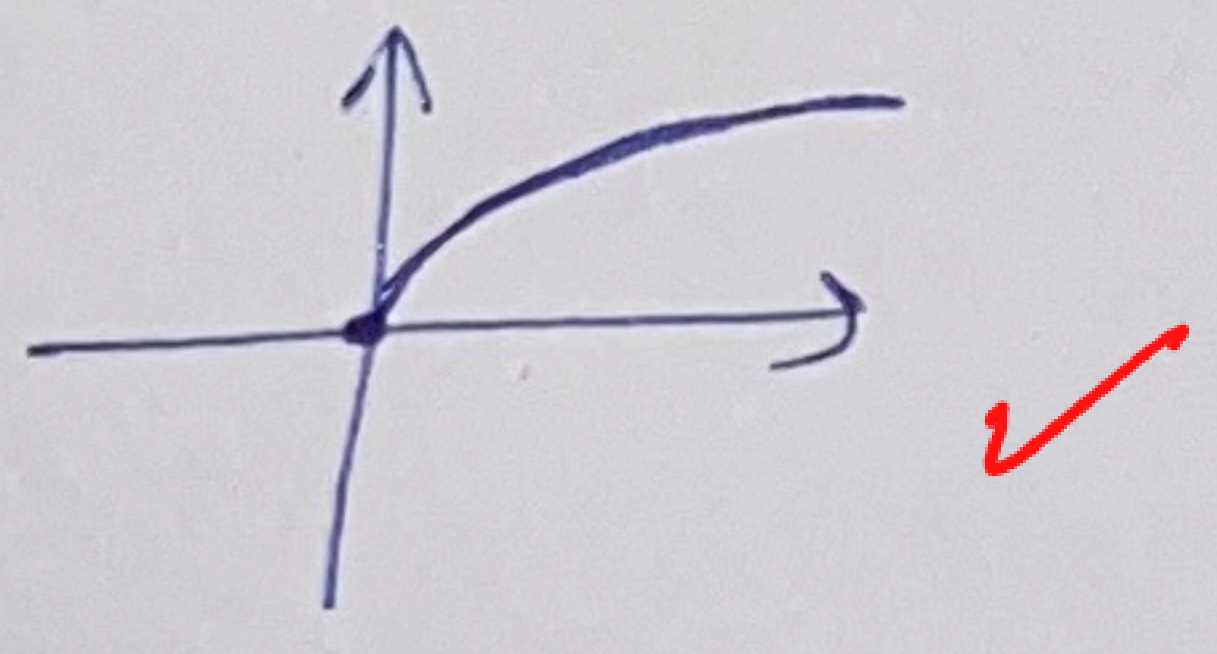
✓ $y^2 - y = \frac{n^2}{2} \Rightarrow n=0 \Rightarrow y^2 - y = 0 \Rightarrow y=0 \text{ یا } y=1$ تابع نیست

$\sin^2 n + \cos^2 \frac{y}{2} = 1 \Rightarrow n=0 \Rightarrow 1 + \cos^2 \frac{y}{2} = 1 \Rightarrow \cos^2 \frac{y}{2} = 0 \Rightarrow y=180^\circ \text{ یا } y=0^\circ$ تابع نیست
د) $2ny = n \Rightarrow n=0 \text{ یا } y=\frac{1}{2}$ تابع نیست

(الف) $n^2 + |y-1| = 4n \Rightarrow n=1 \Rightarrow |y-1| = 3 \Rightarrow y=4 \text{ یا } y=-2$ تابع نیست
شان نقض
 $1 + |y-1| = 4 \Rightarrow |y-1| = 3 \Rightarrow y=-2 \text{ یا } y=4$

(ب) $y^2 + 2n = 0 \Rightarrow \begin{cases} y_1^2 + 2n_1 = 0 \\ y_2^2 + 2n_2 = 0 \end{cases} \Rightarrow n_1 = n_2 \Rightarrow y_1^2 = y_2^2 \Rightarrow y_1 = y_2$ تابع است
تعریف ریاضی

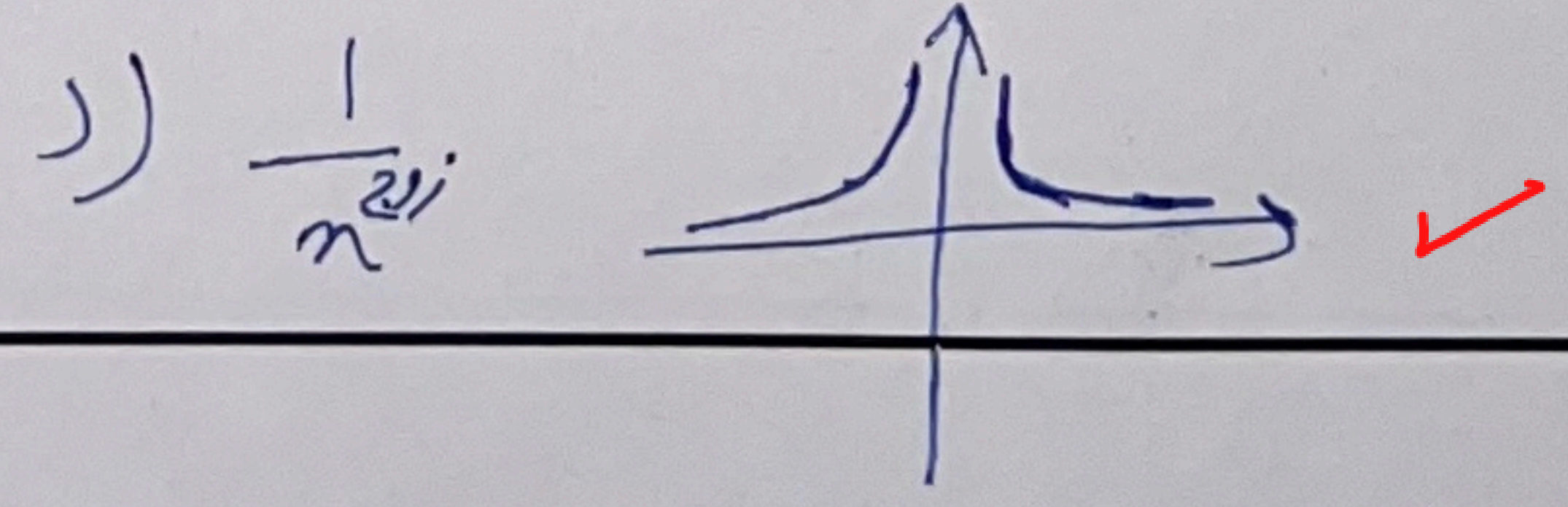
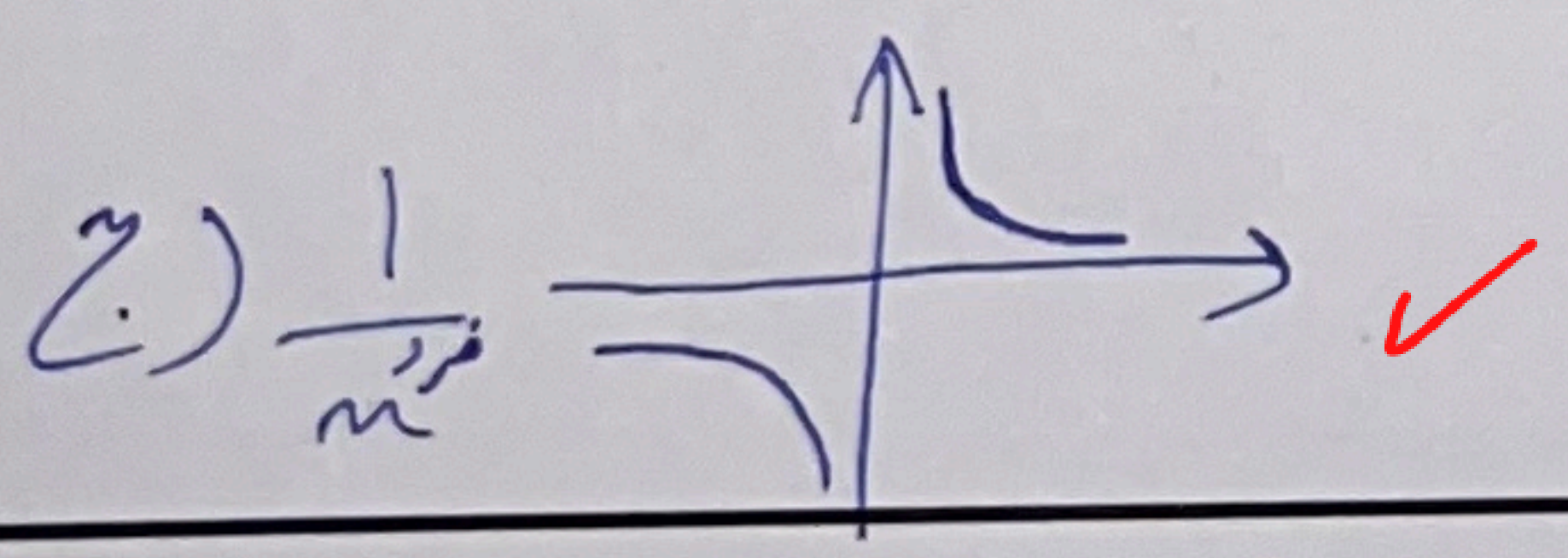
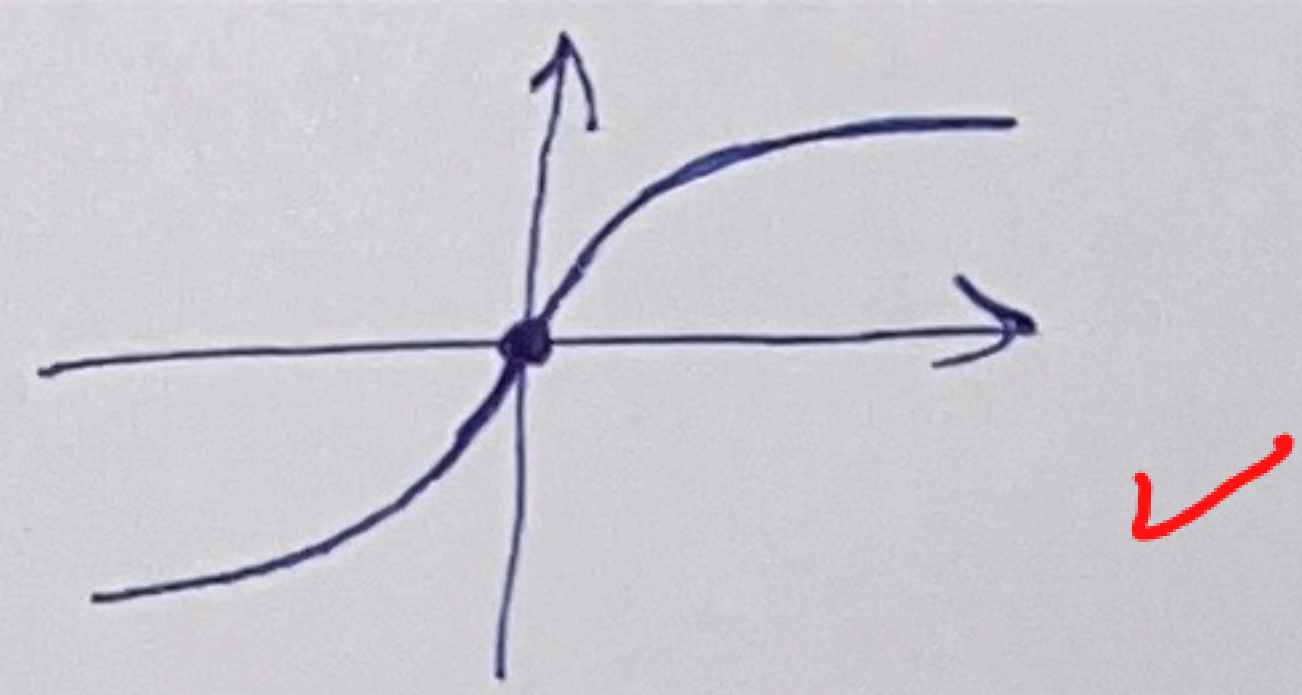
(الف)



$\sqrt{x}$ زوج

(ب)

$\sqrt{x}$ فرد



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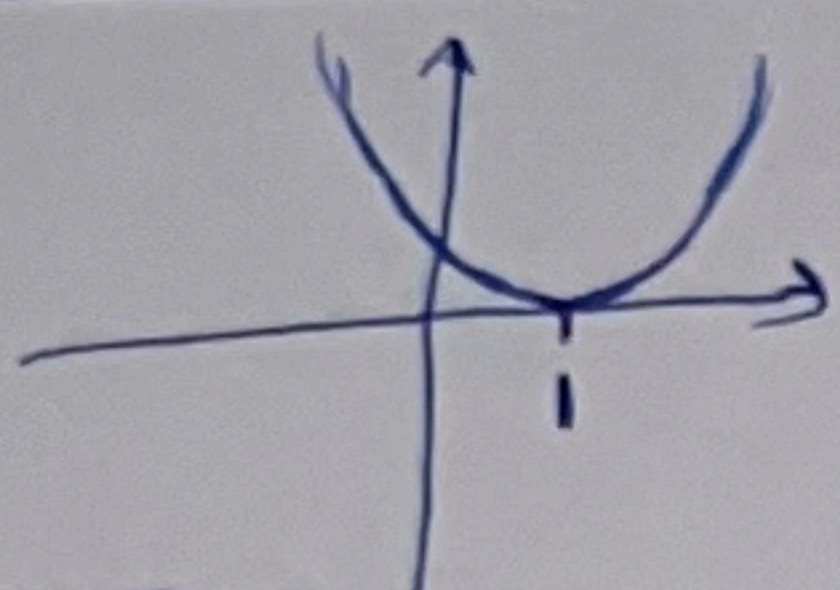
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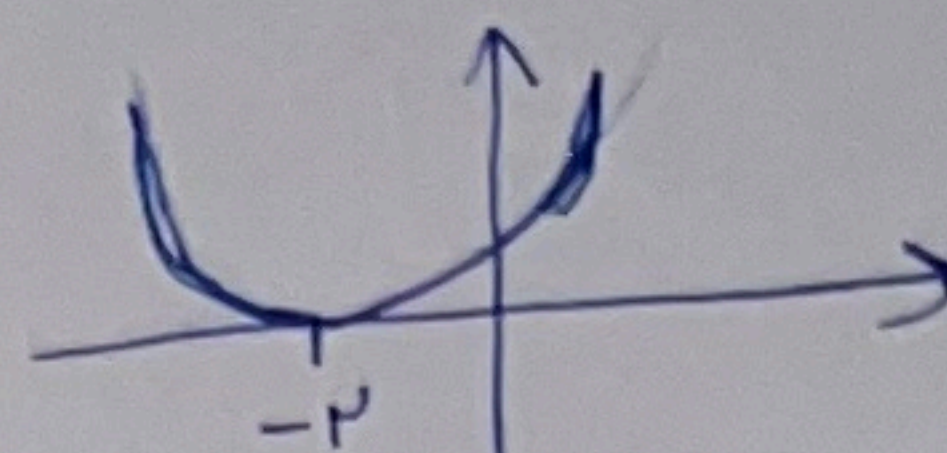
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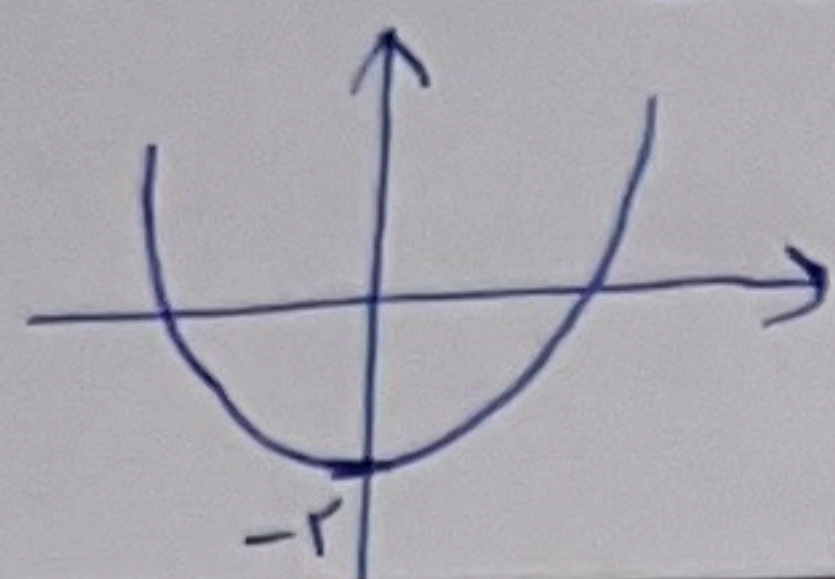
ب



✓

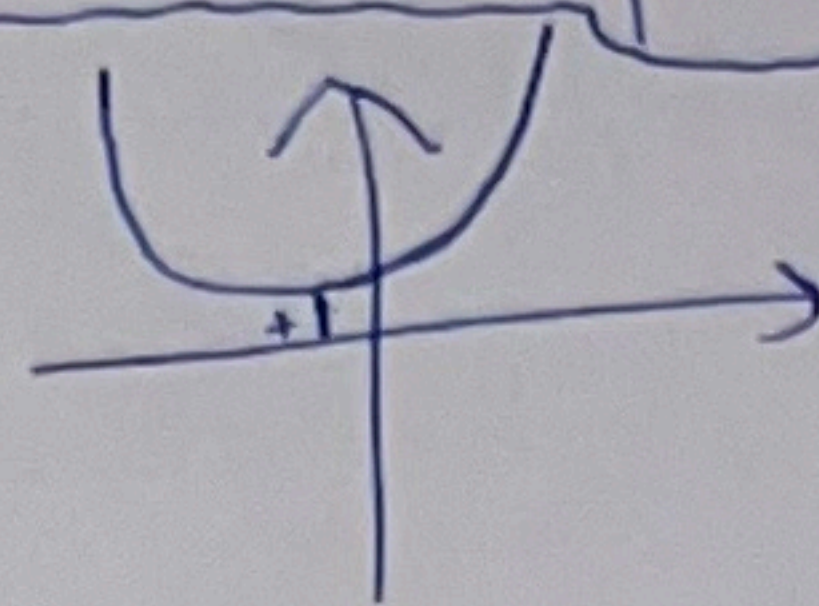
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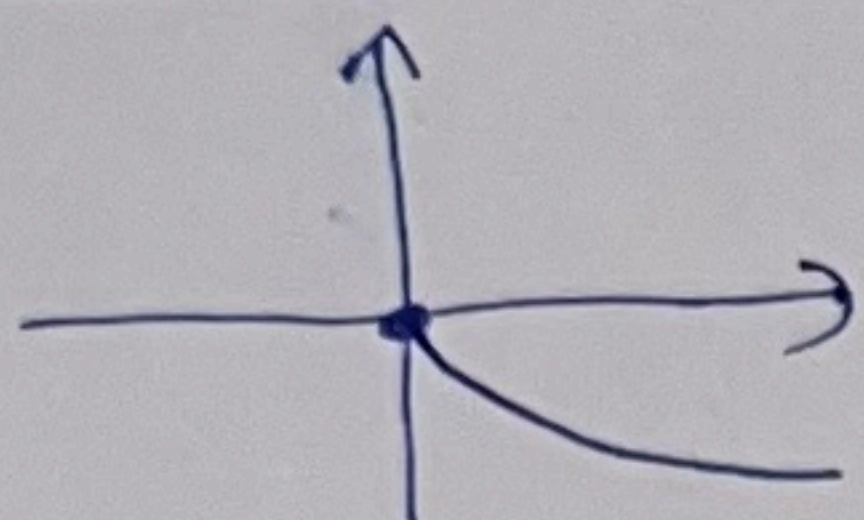
د



✓

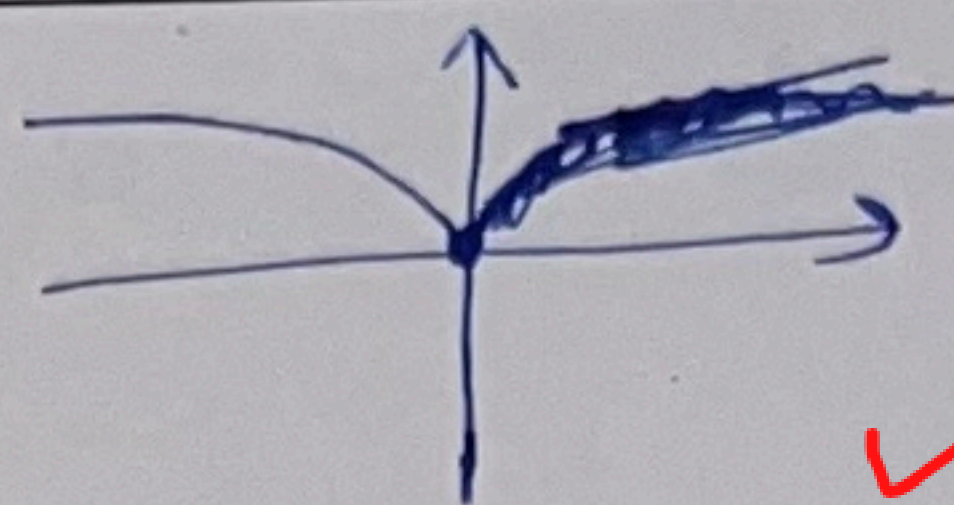
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الف



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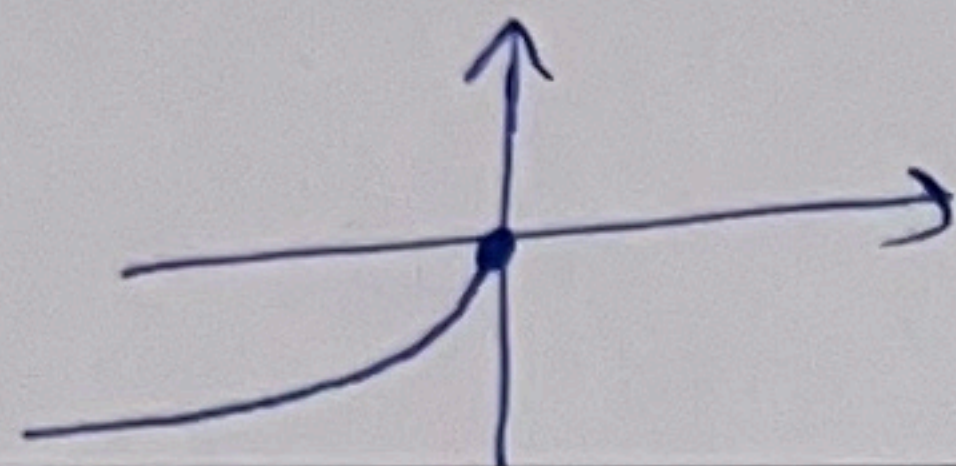


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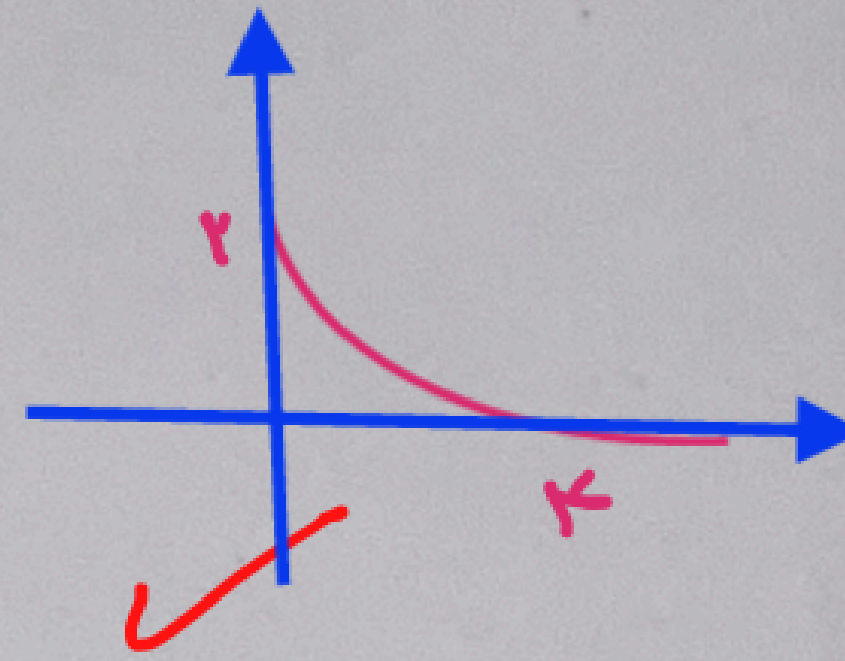
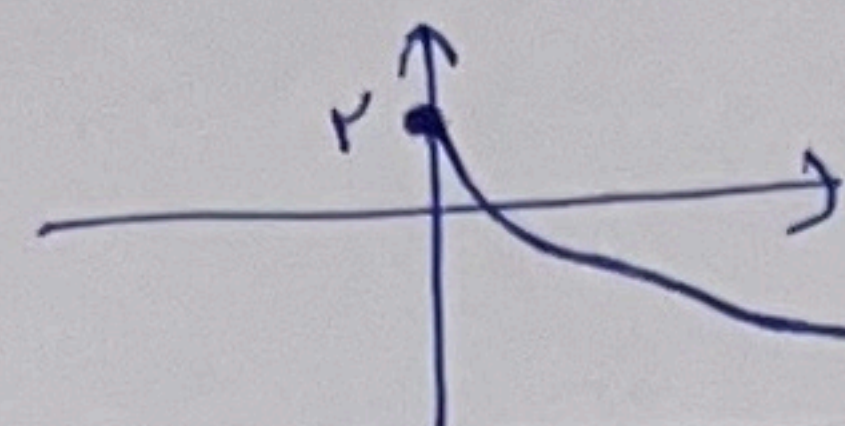
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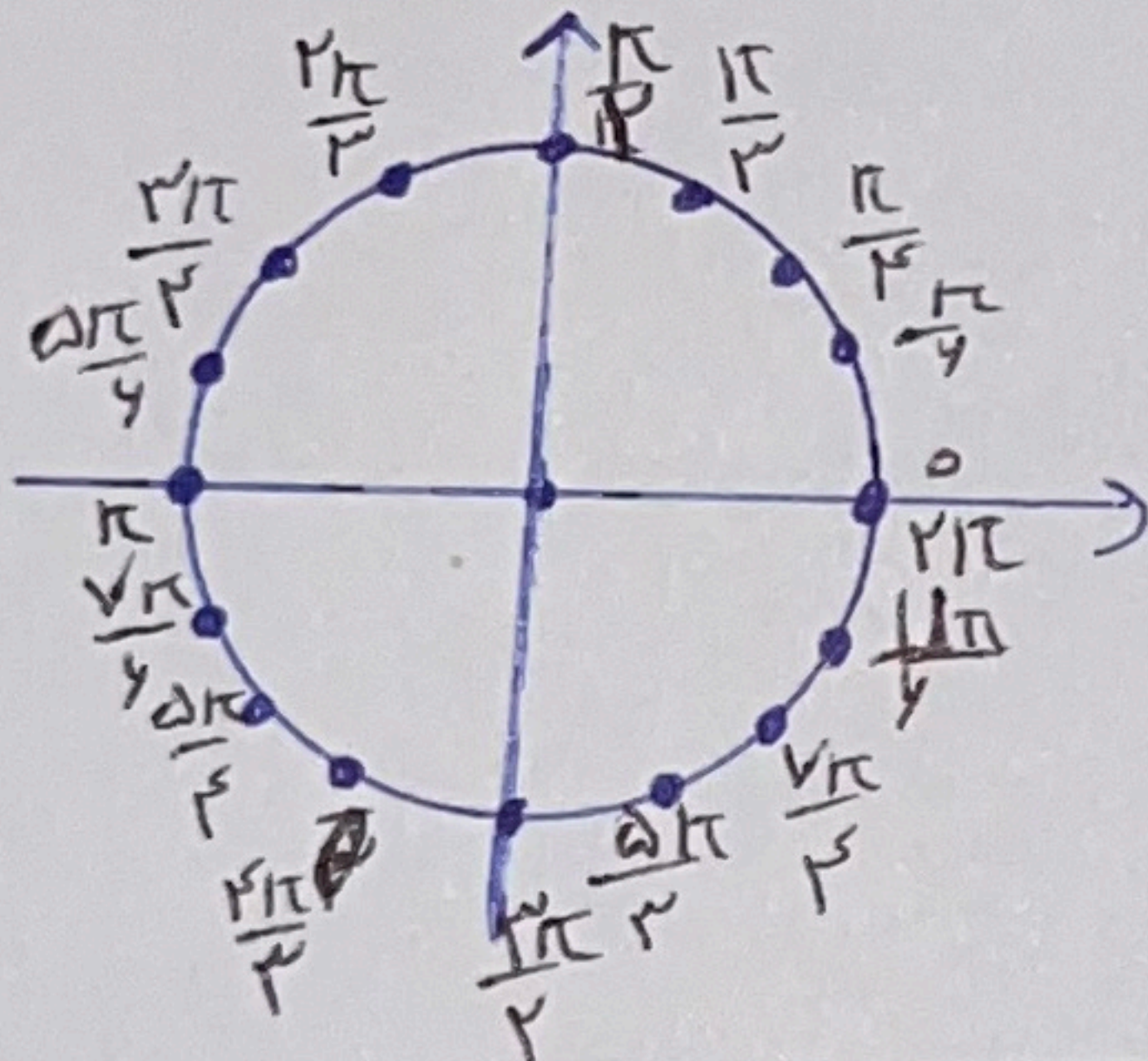
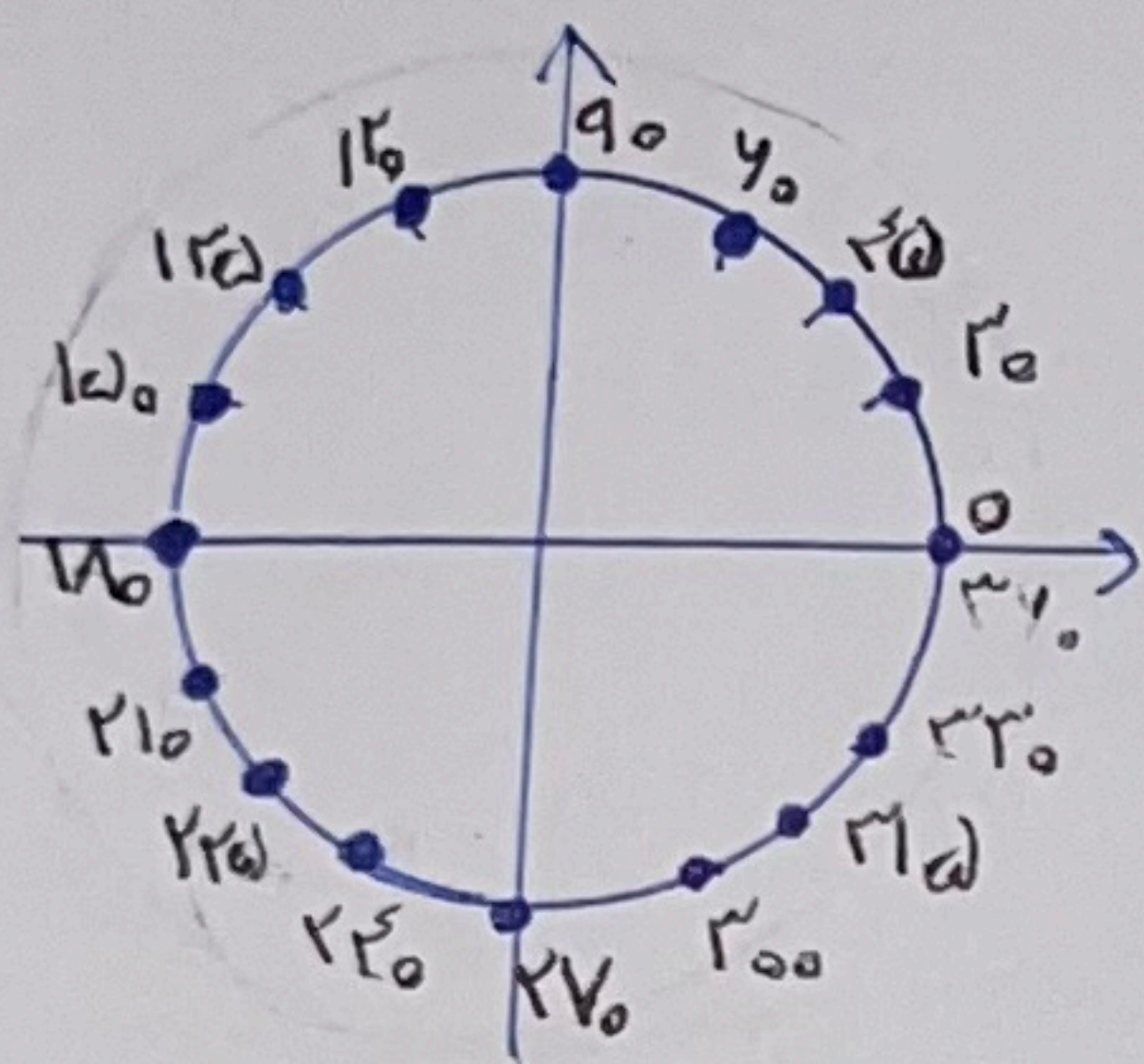
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✓

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الف) $-\frac{1}{2}$ ✓

ب) $\frac{1}{2}$ ✓

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ج) $\frac{1}{2}$ ✓

د) $-\frac{1}{2}$ ✓