

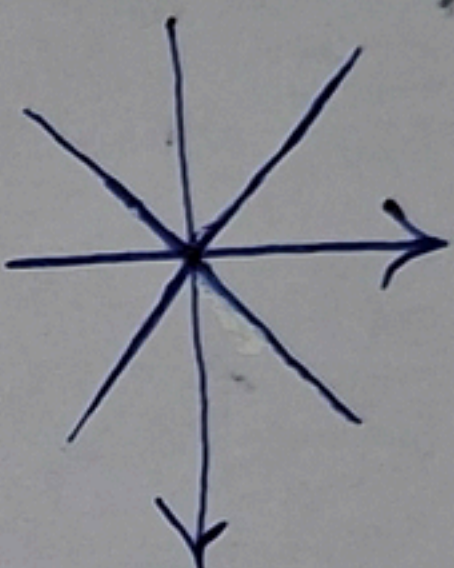
$$a^2 + a^3 = 4a$$

$$a^2 - 4a + 3 = 0$$

$$\sqrt{\frac{1}{a}} = 3$$

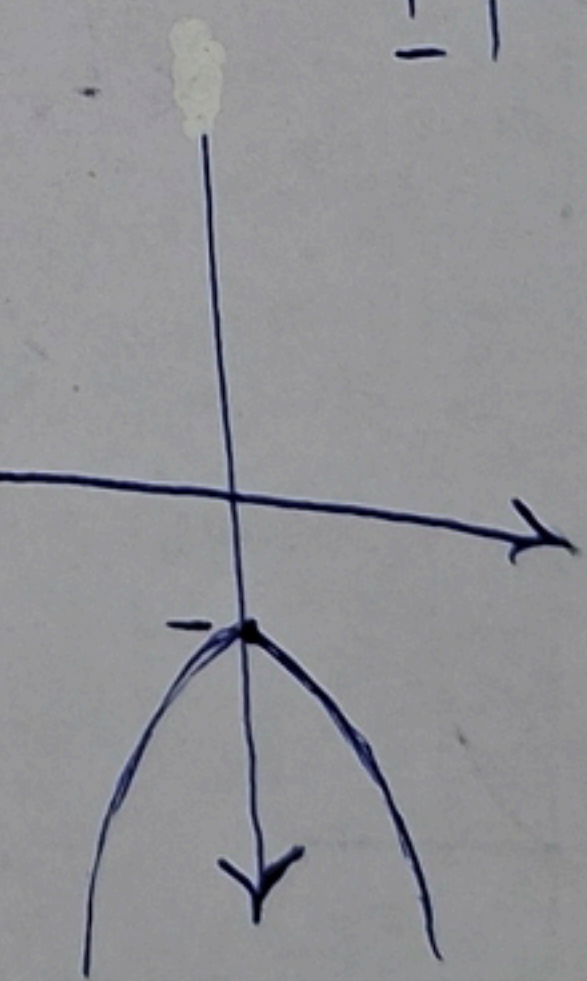
۱ و ۳

$$1, |y| = |x|$$



$$y, |y| = -\sqrt{x-1}$$

$$y = \pm \sqrt{x-1}$$



الف) $x = y \Rightarrow |y-1| = \sqrt{y-2} = \sqrt{4} \Rightarrow y-1 = \pm 2 \Rightarrow y < -1$

ب) $x = 0 \Rightarrow y^2 - y = 0 \Rightarrow y = 1$ یا $y = 0$

ج) $x = 0 \Rightarrow 0 + \cos^2 \frac{y}{2} = 1 \Rightarrow y = 0$ یا $y = 2\pi$

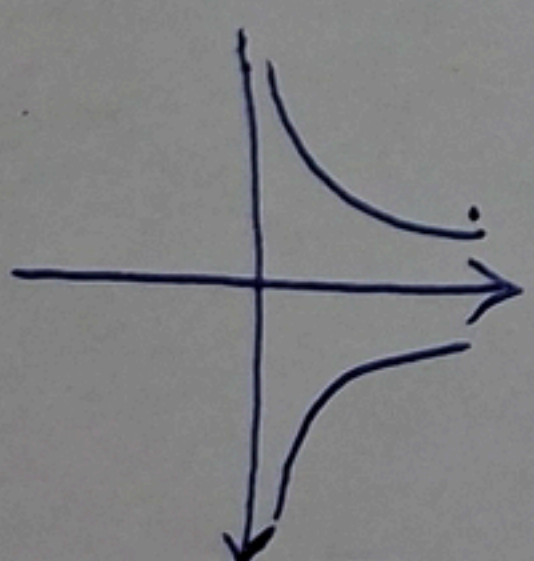
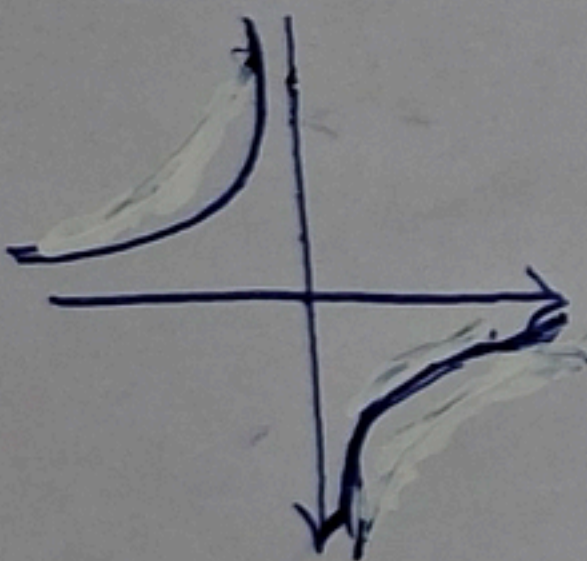
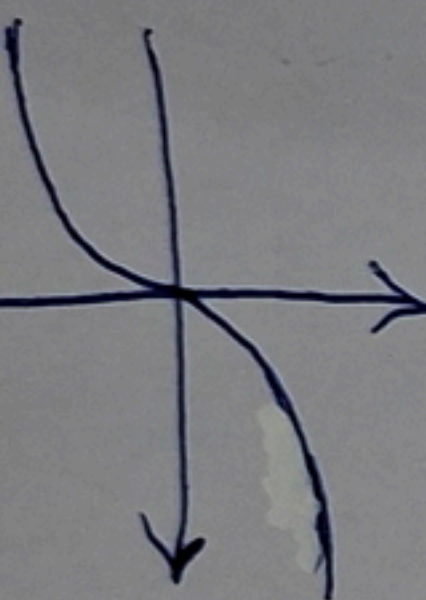
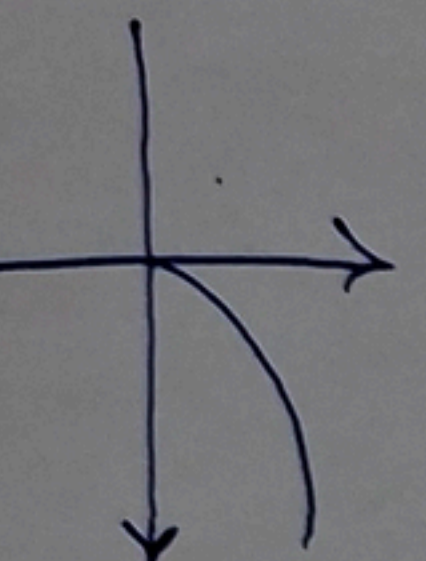
د) $x = 0 \Rightarrow y = 0$ و می‌تونه بی‌شمار عدد باشه $\Rightarrow$

الف) $x = 1 \Rightarrow 1 + |y-1| = 4 \Rightarrow |y-1| = 3 \Rightarrow y = 4$ یا $y = -2$

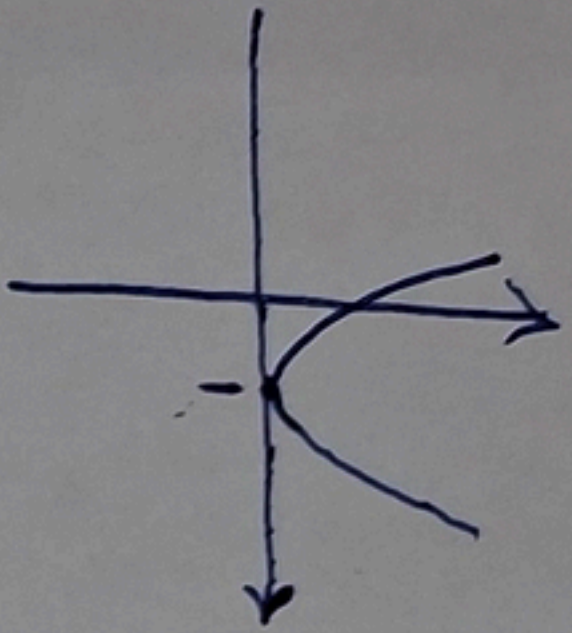
مثال بعضی: X

ب) $\begin{cases} y_1 = -y_2 x_1 \\ y_2 = -y_1 x_2 \end{cases} \xrightarrow{x_1 = x_2} y_1 = y_2 \Rightarrow y_1 = y_2$ تابع است ✓

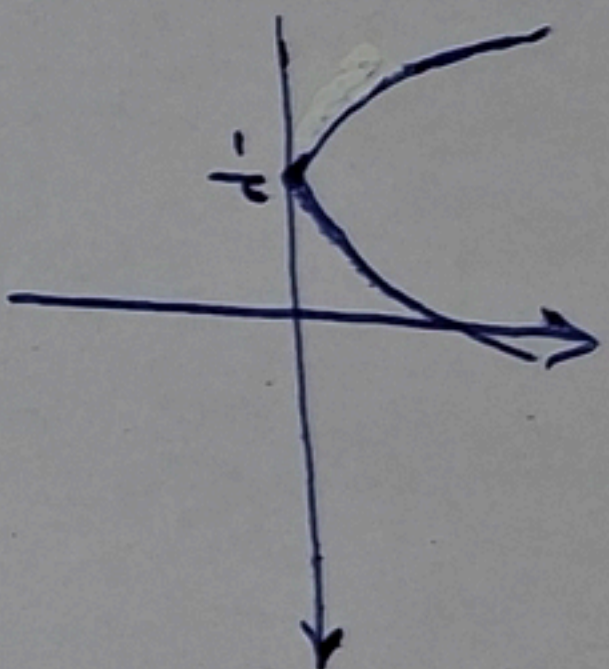
الف) ب) ج) د)



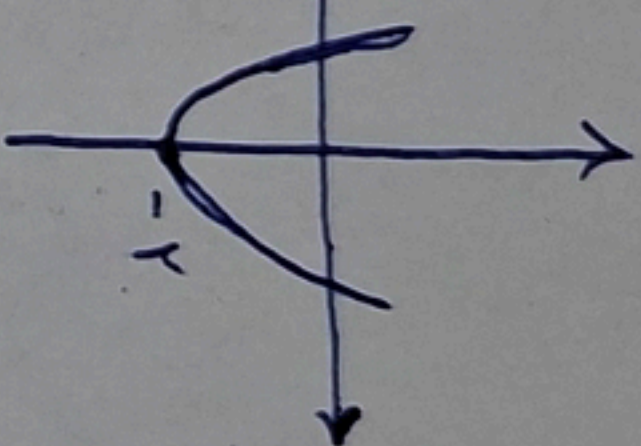
الف



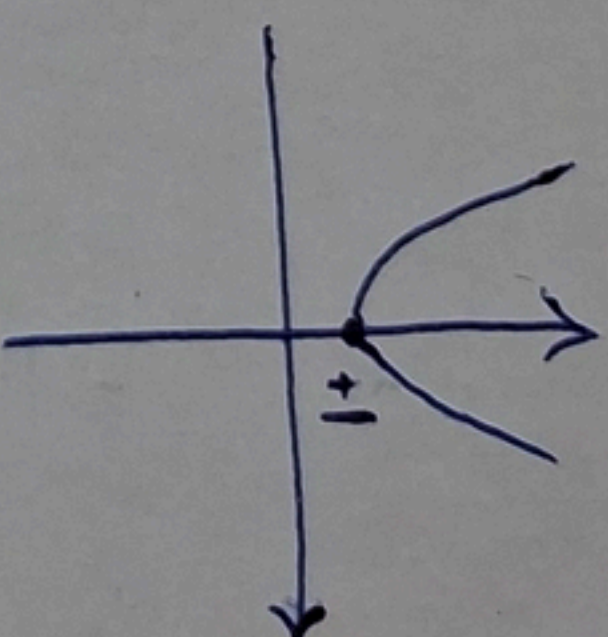
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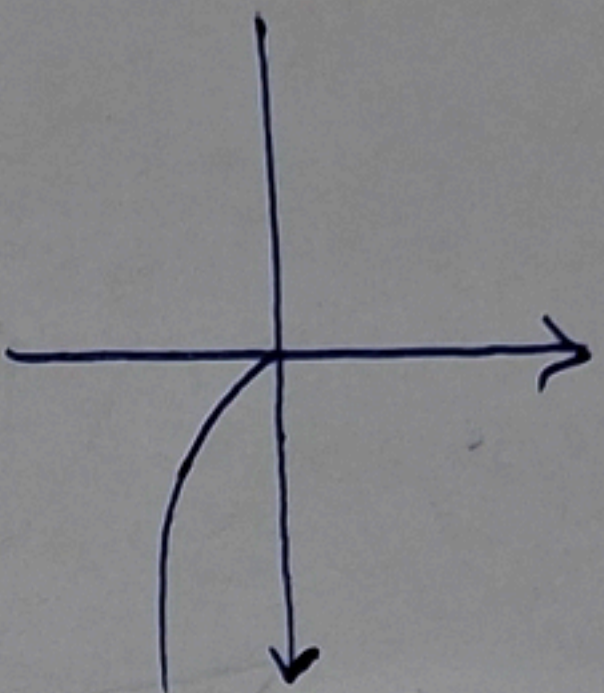


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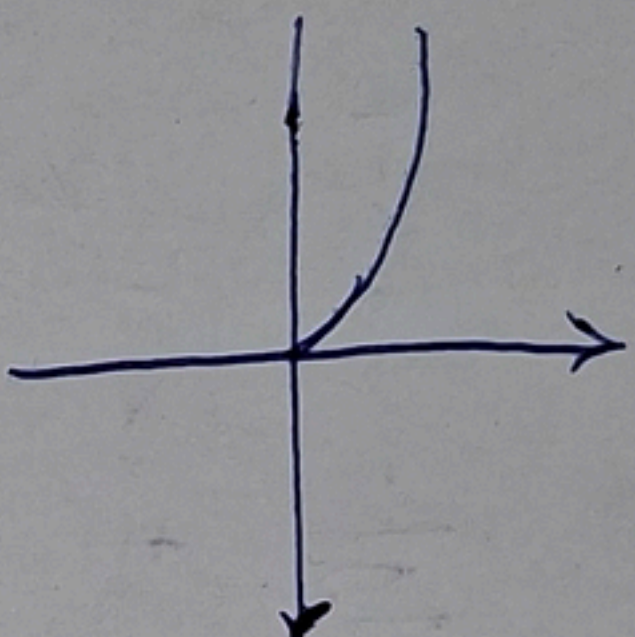


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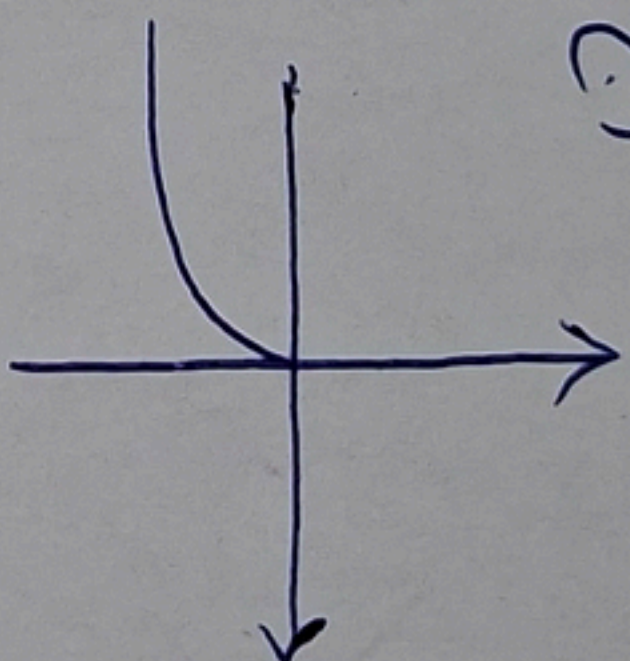
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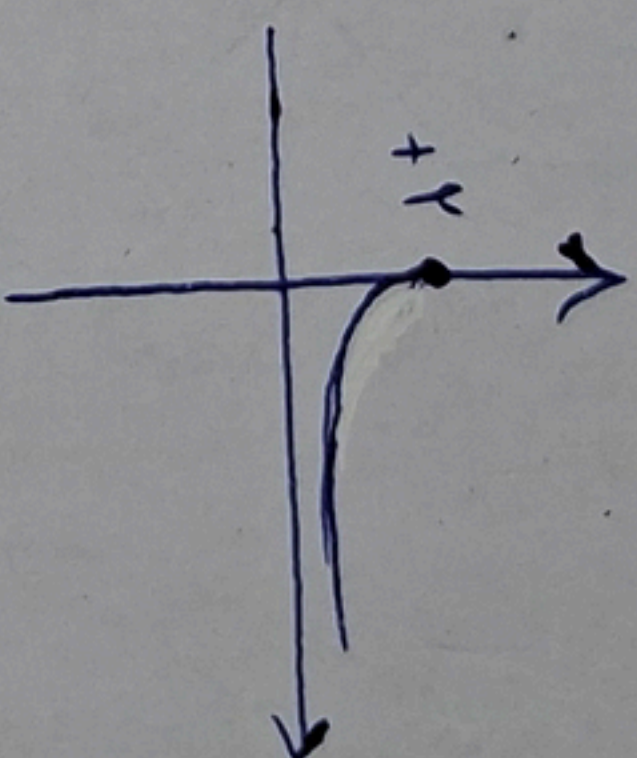
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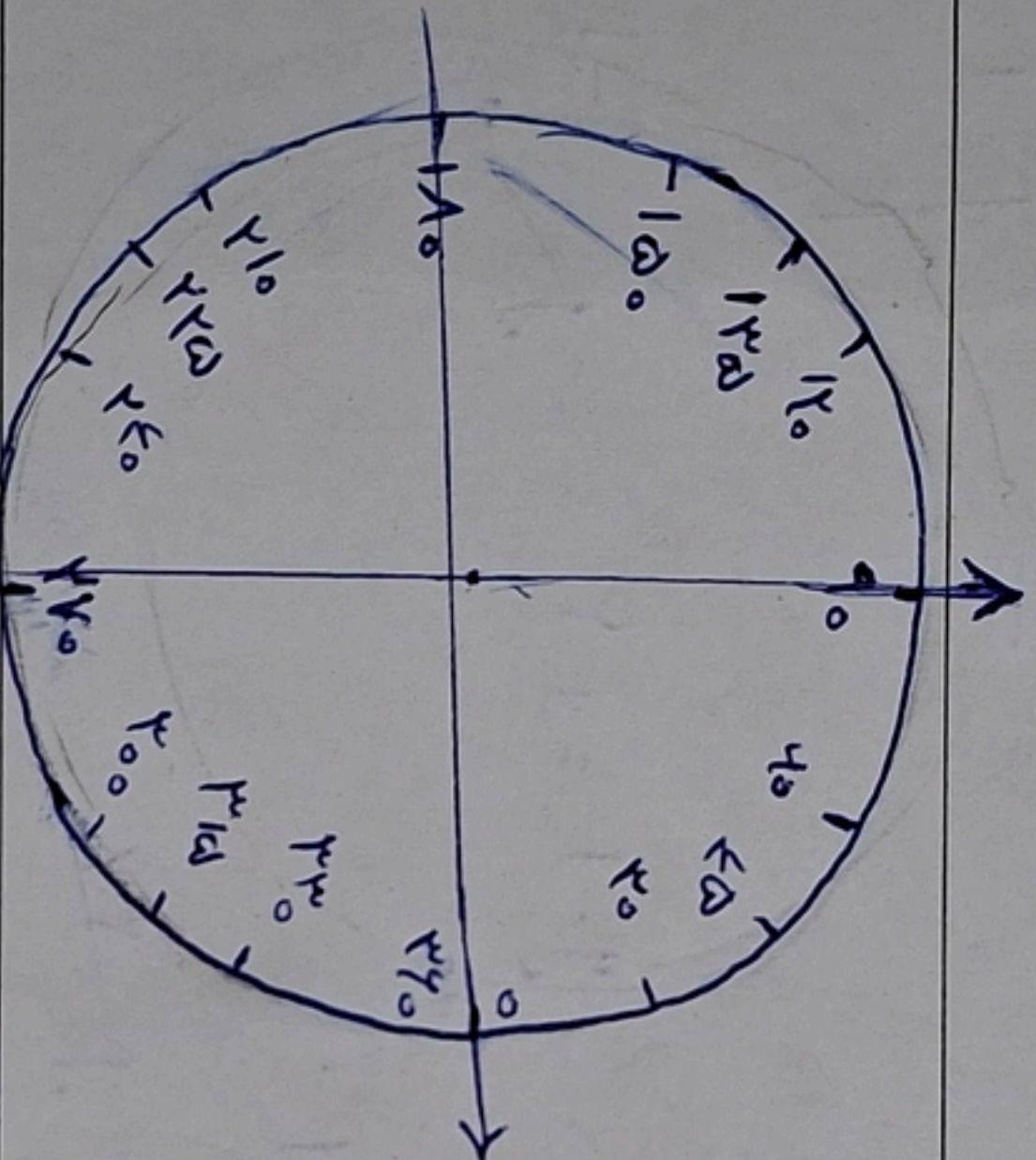
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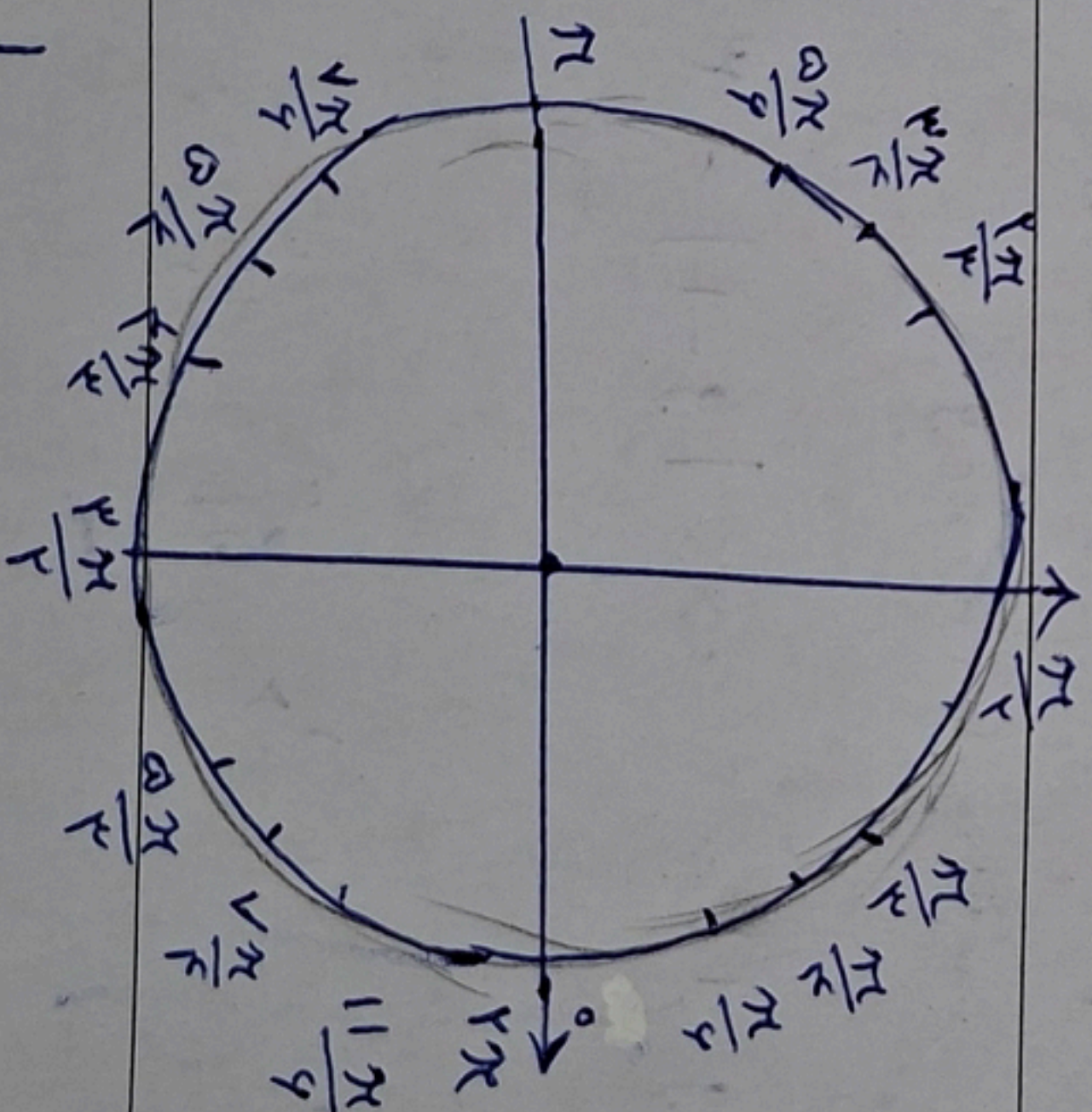
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الف - $\frac{1}{2}$

ب $\frac{1}{2}$

ج $\frac{1}{2}$

د $-\frac{1}{2}$

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