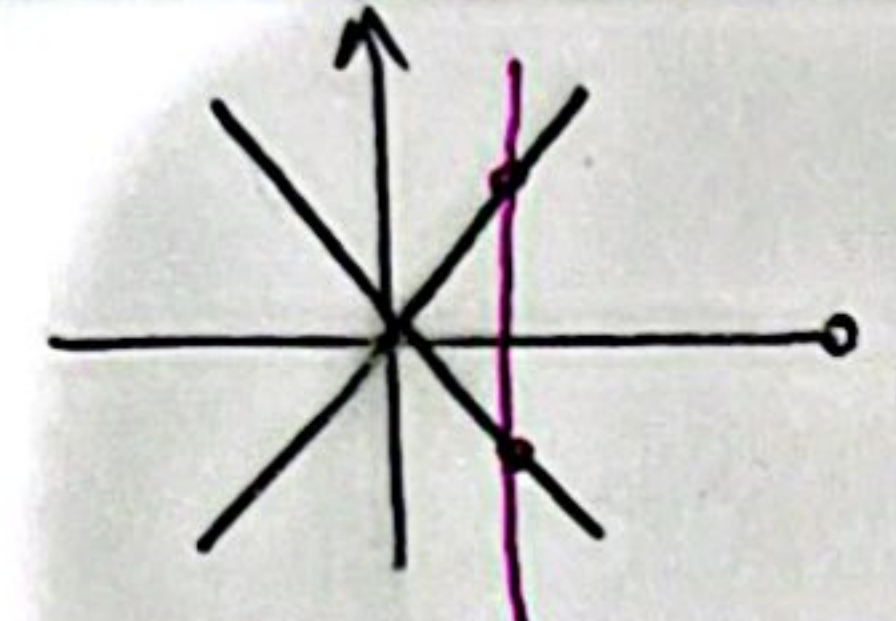
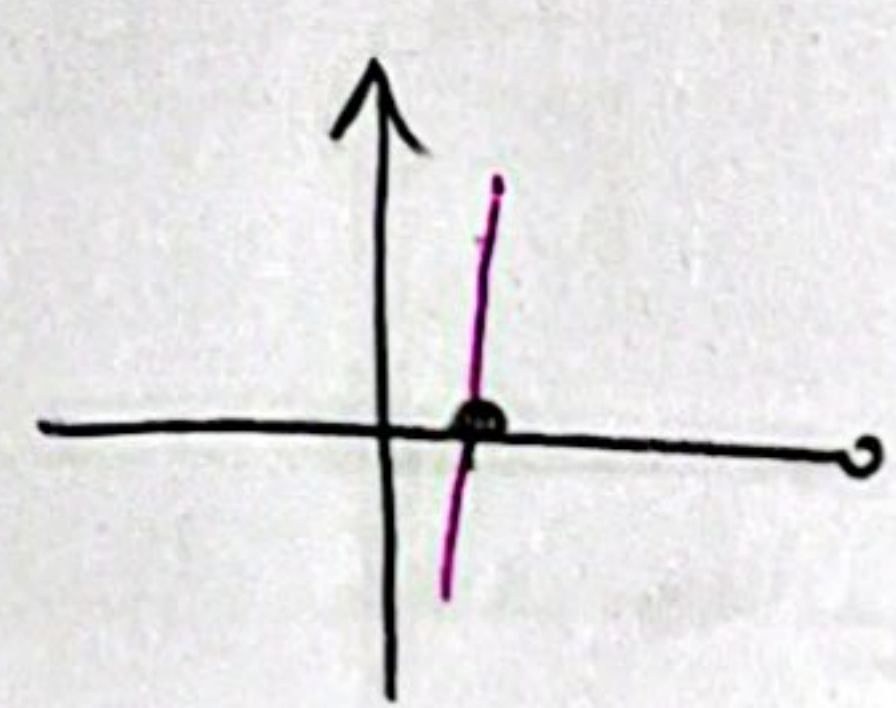
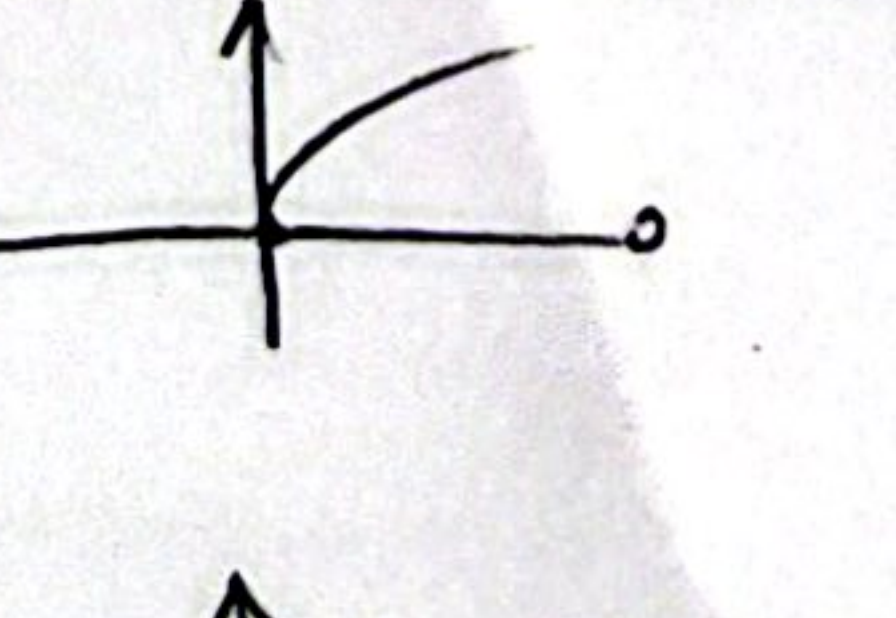
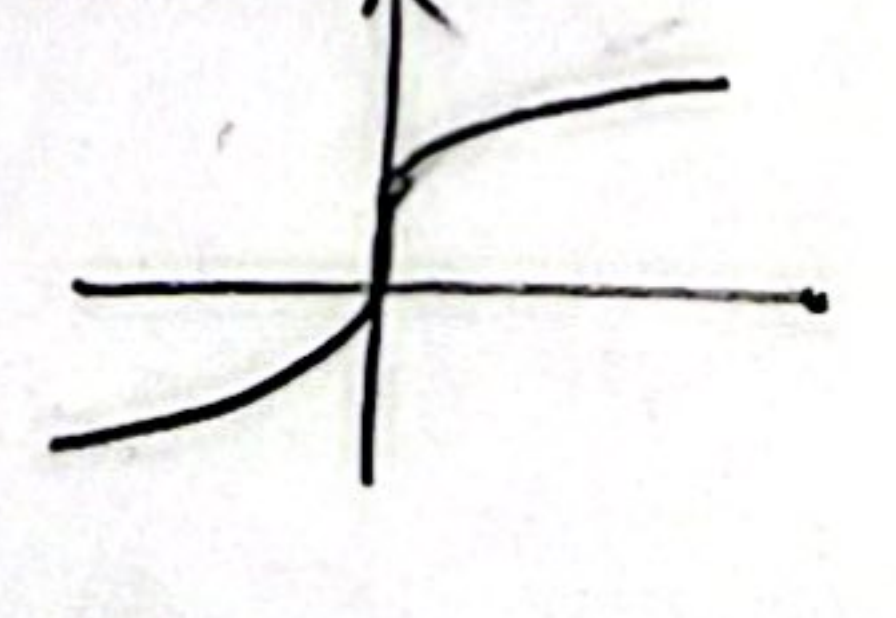
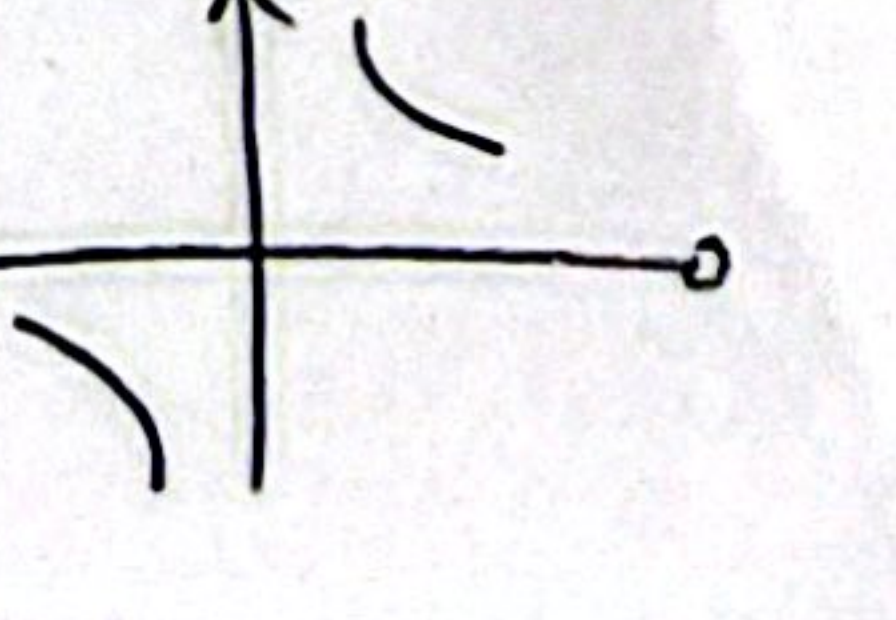
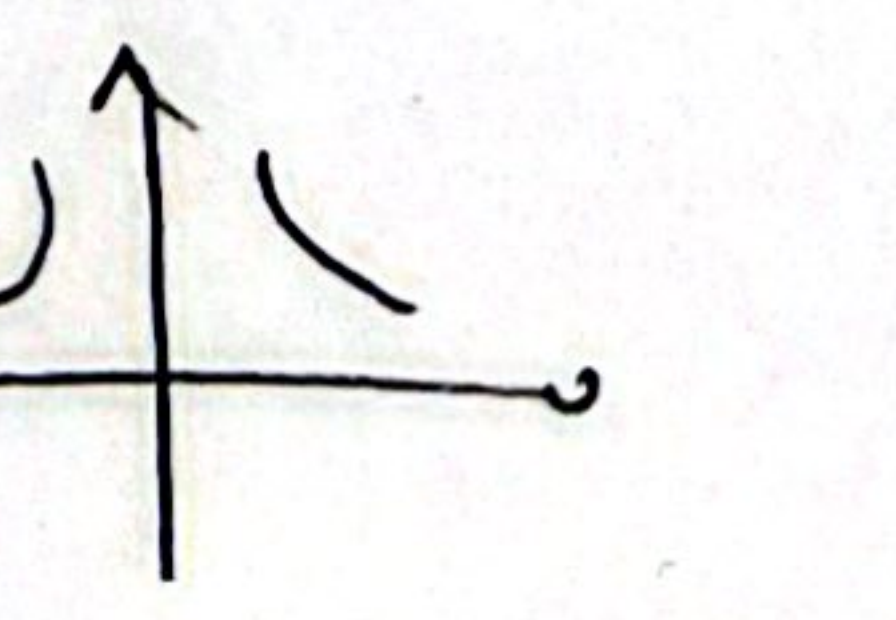
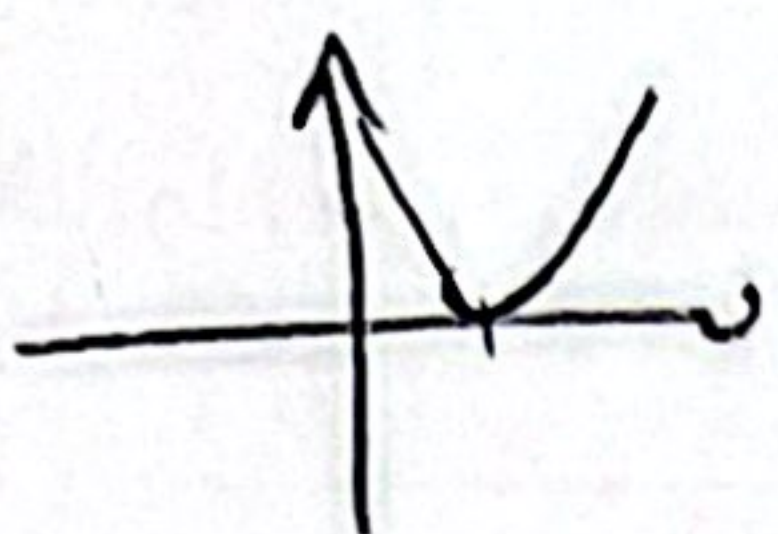
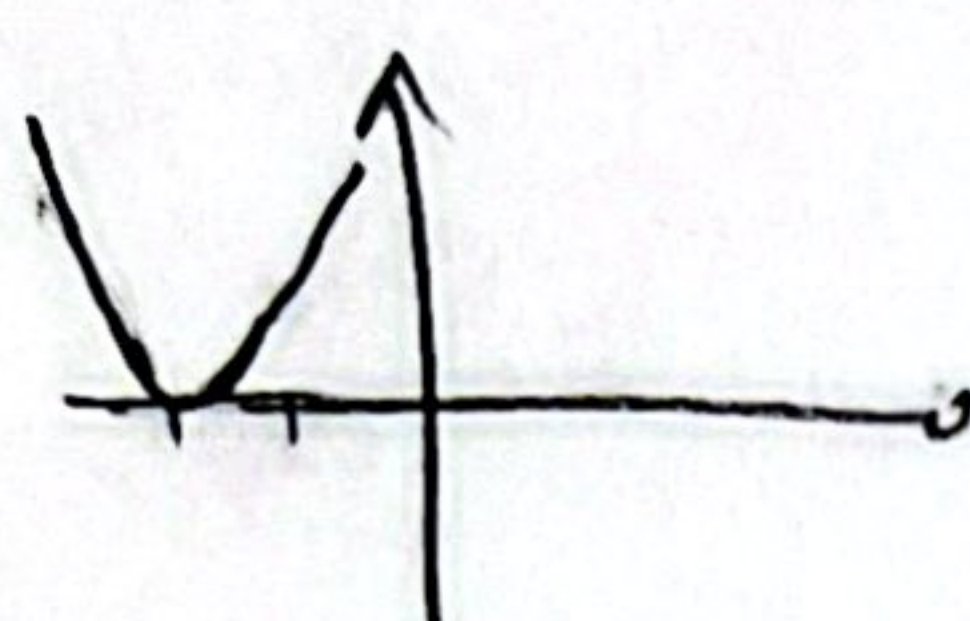
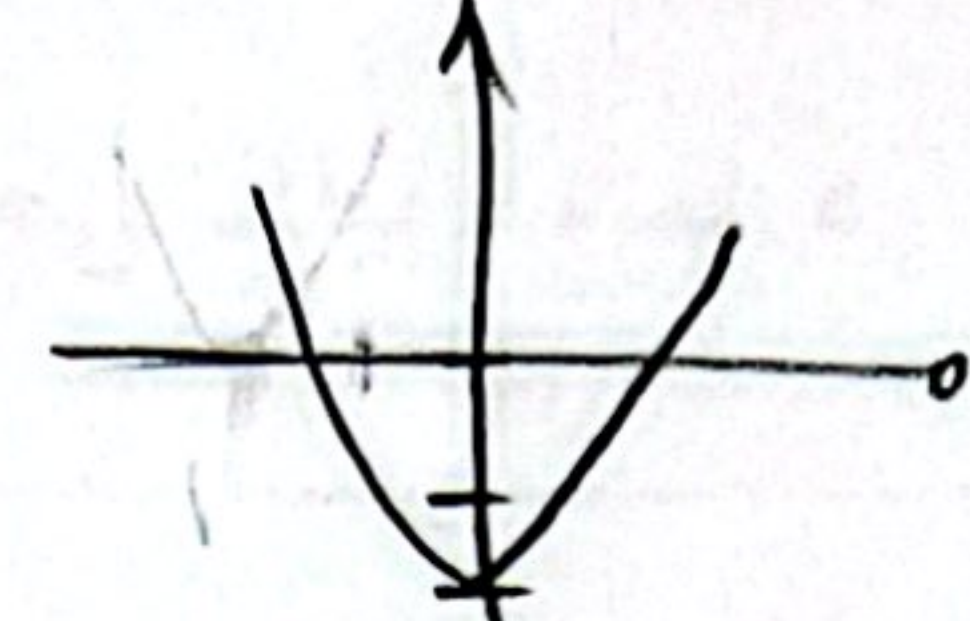
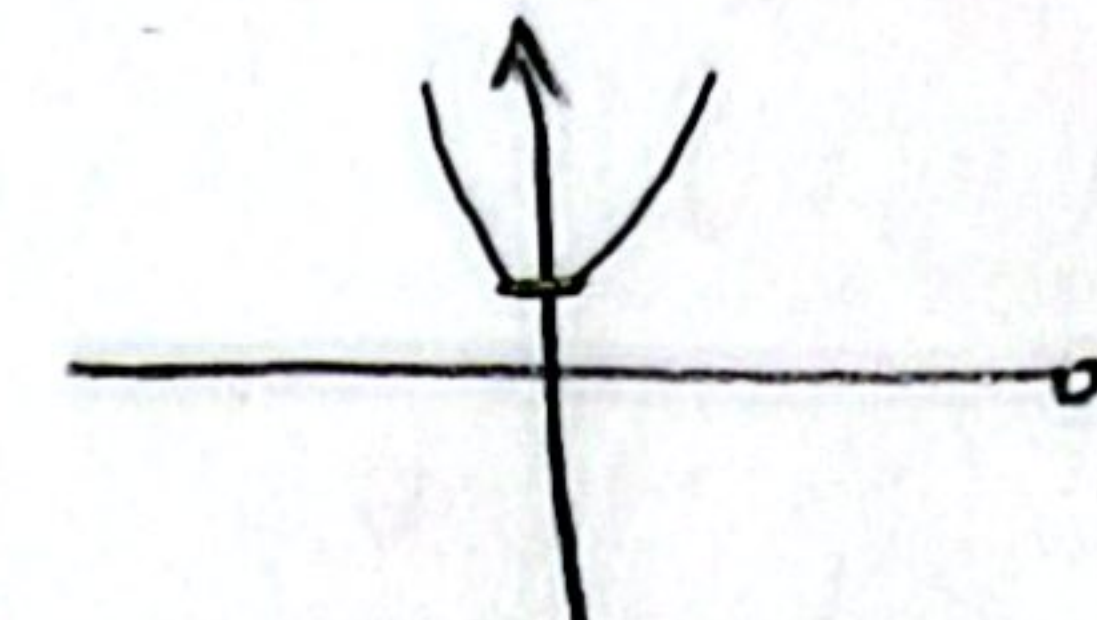
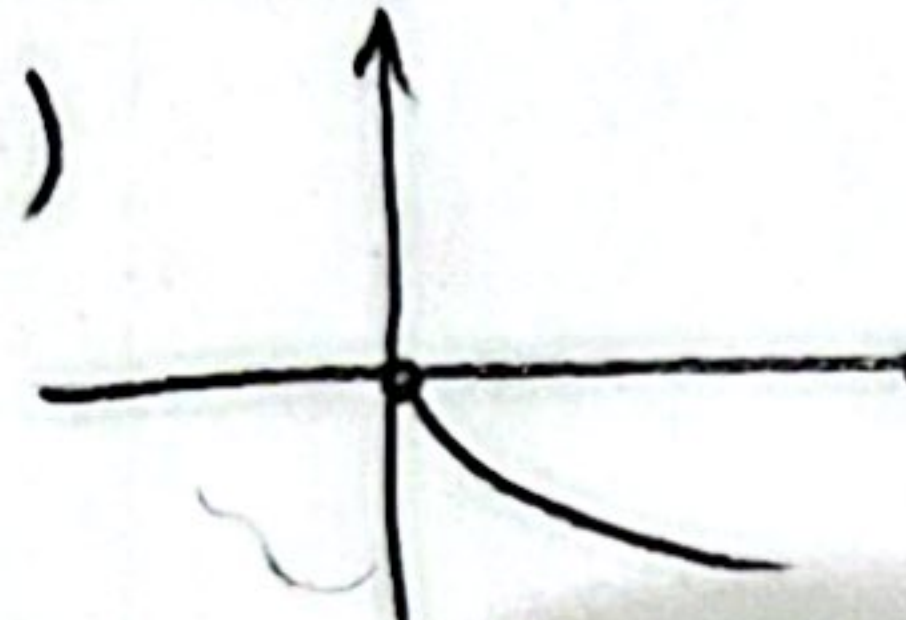
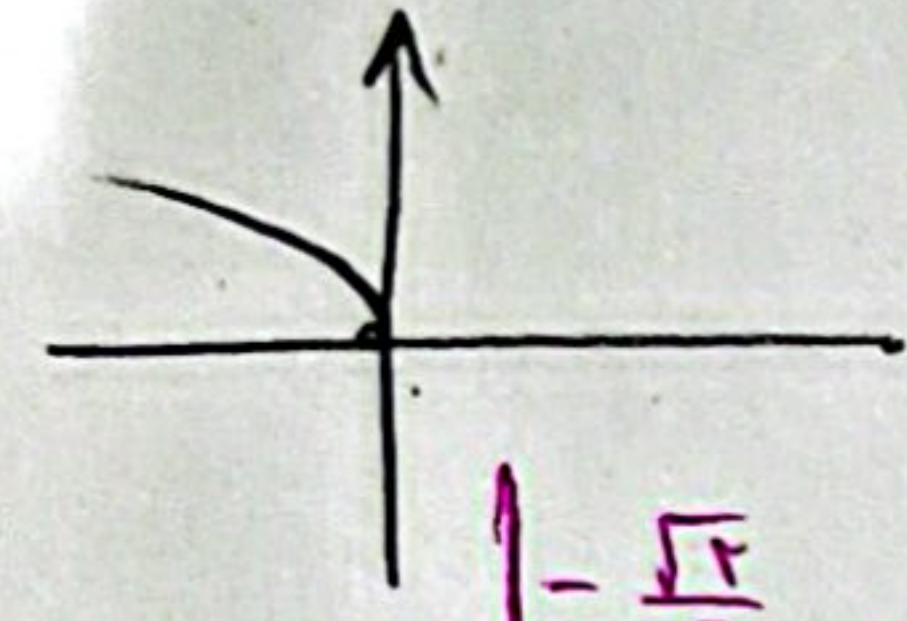
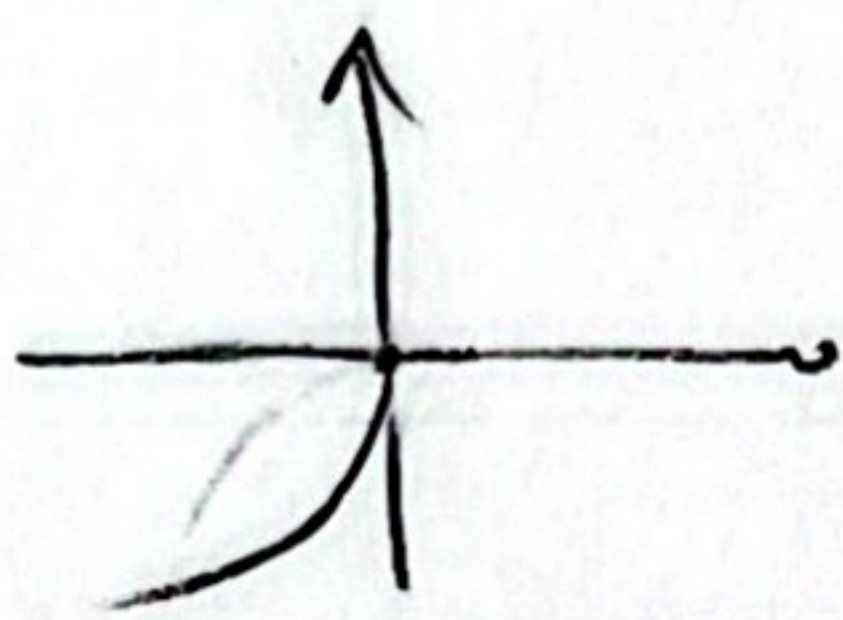
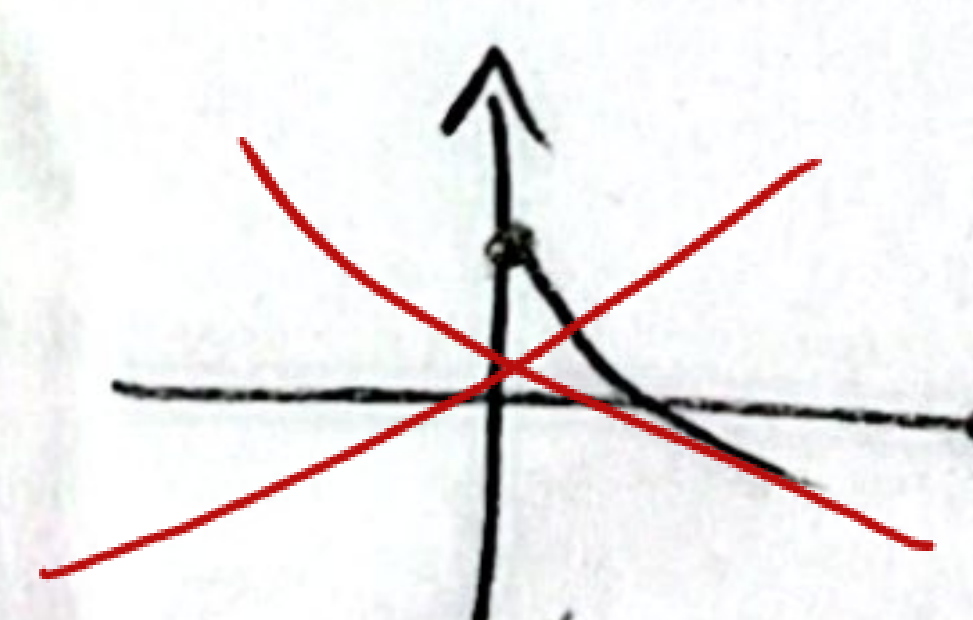
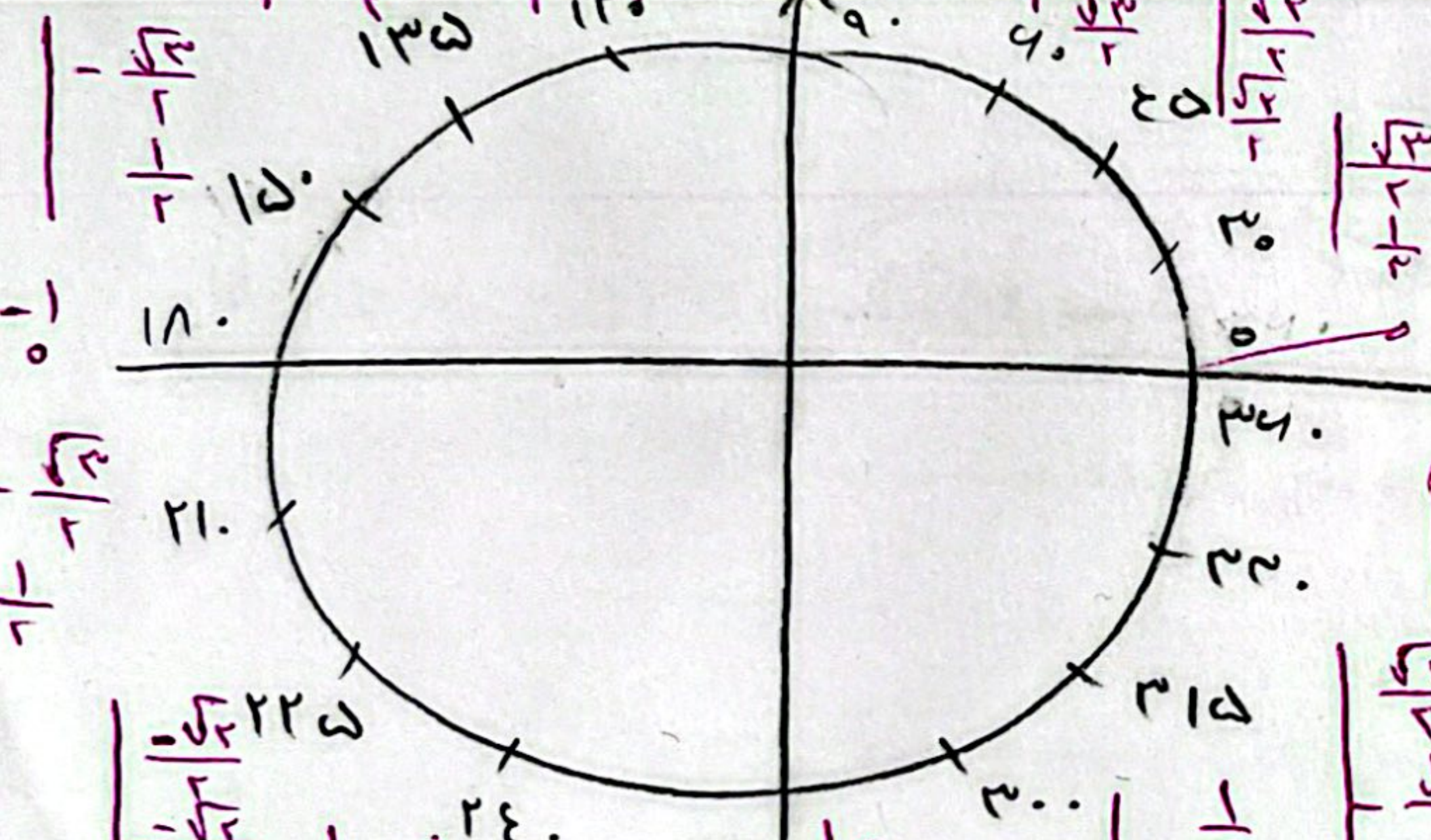
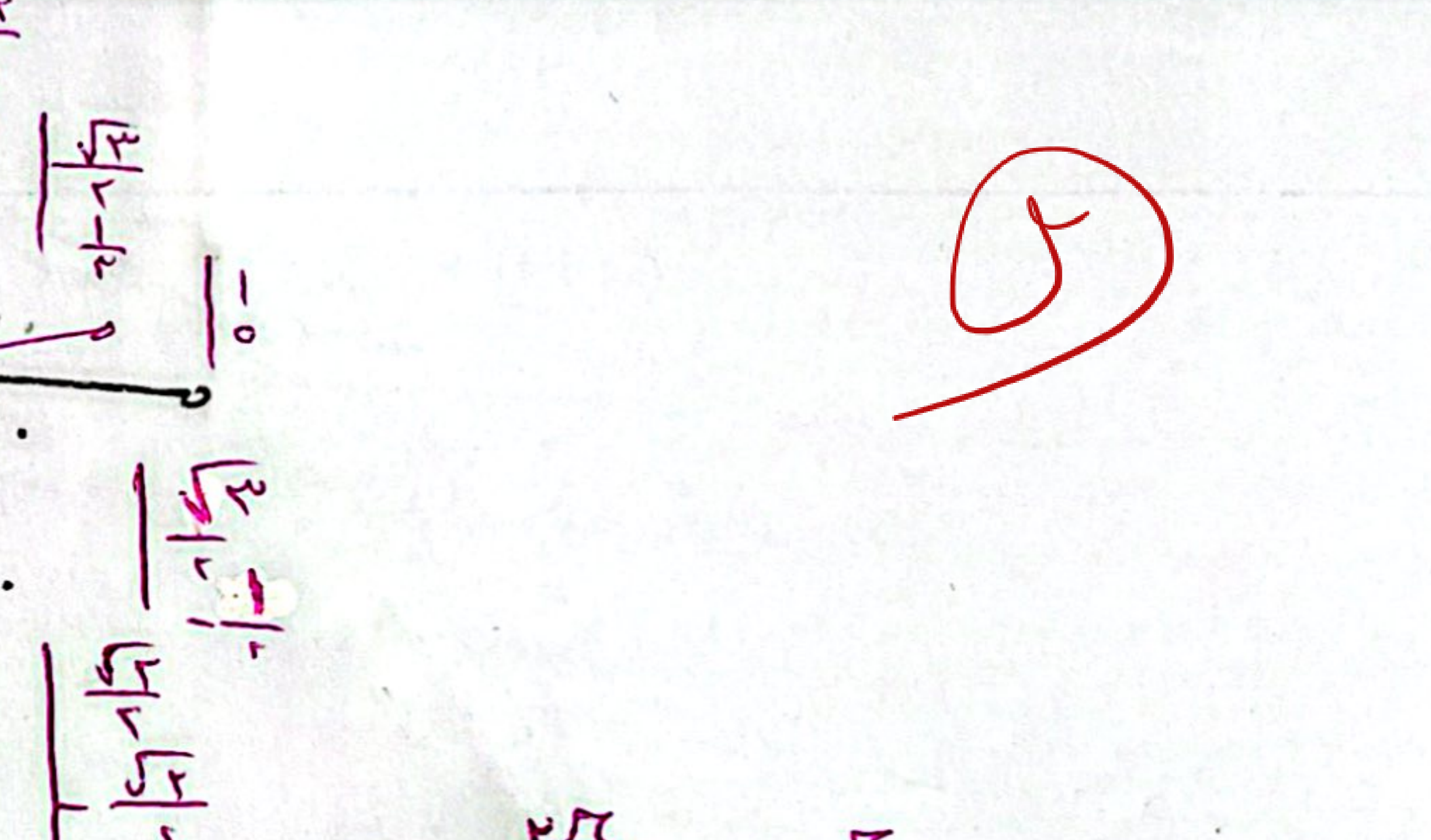
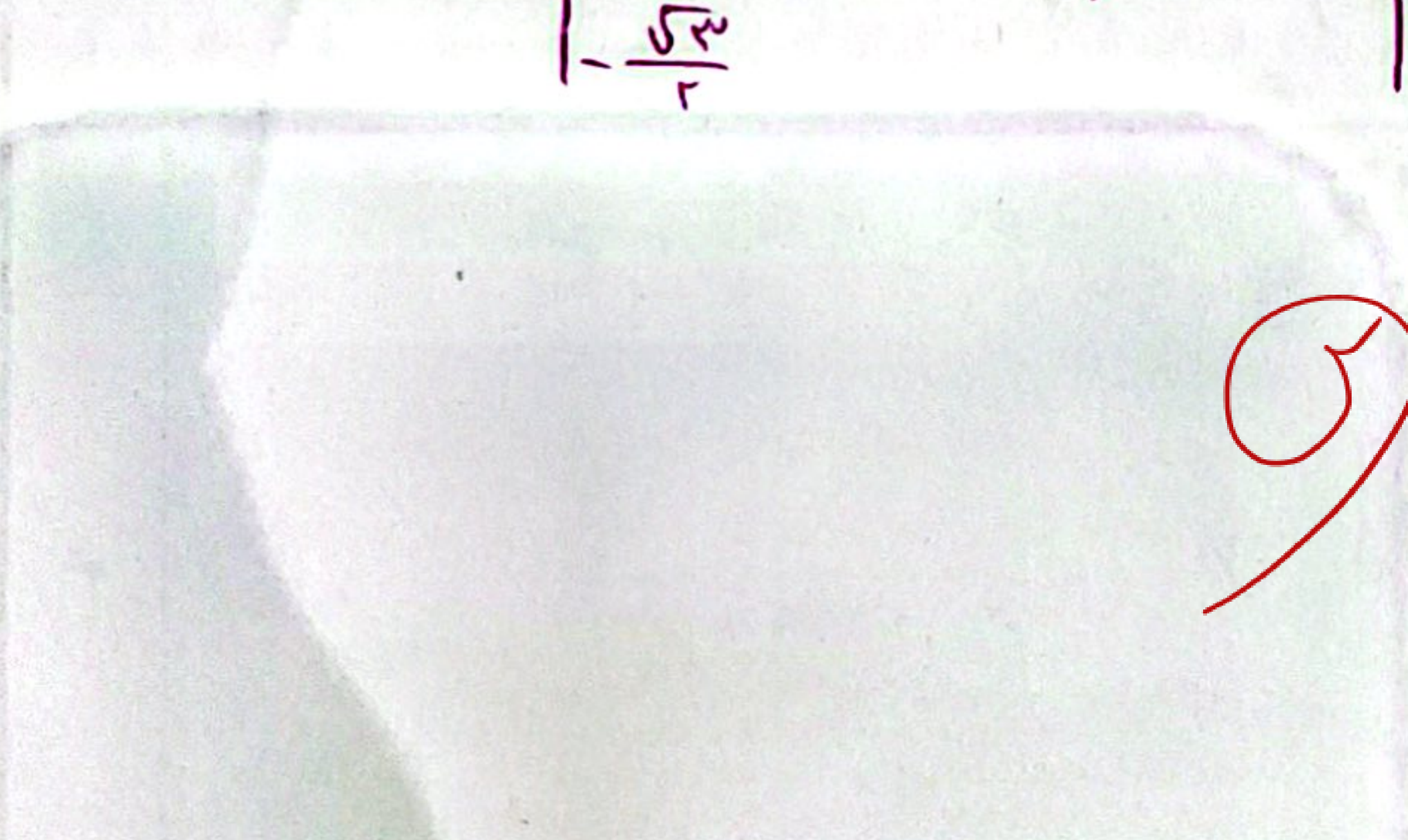
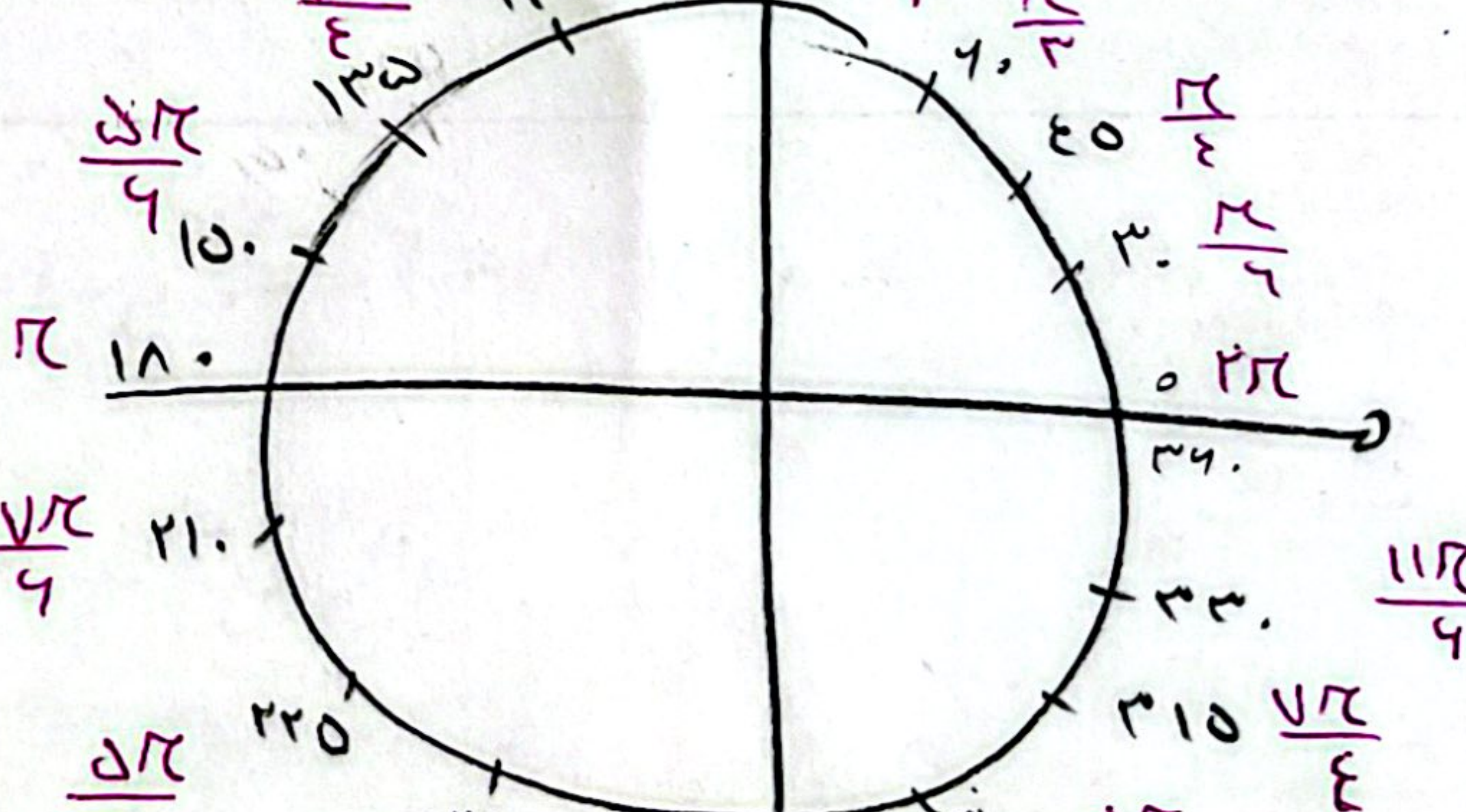


$a^2 + 3 = 4a \rightarrow a^2 - 4a + 3 = 0 \rightarrow (a-1)(a-3) = 0$ $\boxed{a=1} \rightarrow \{(1,4), (1,4), (2,3)\} \checkmark$ $\boxed{a=3} \rightarrow \{(1,12), (1,12), (2,6)\} \checkmark$ $a=1$$a=3$	۱
الف)  ب) $y + \sqrt{x-1} = 0$ $y=0$ $x=1$ در نقطه قطع یکنه تابع است 	۲
الف) $x=3$ $y-1=1 \rightarrow y=2$ $y-1=-1 \rightarrow y=0$ ب) $x=0$ $y=0, 1$ ج) $x=0$ $\cos^2 \frac{y}{2} = 1 \rightarrow 180^\circ = \pi = y$ $360^\circ = 2\pi = y$ د) $x=0$ $y \in \mathbb{R}$ بداری $x \neq 1$ و داد پس تابع نیست	۳
الف) $x=1$ $1 + y-1 = 4 \rightarrow y-1 = 3$ $y-1=3 \rightarrow y=4$ $y-1=-3 \rightarrow y=-2$ ب) $y_1^3 + 3x_1 = 0$ $y_2^3 + 3x_2 = 0$ $x_1 = x_2$ $y_1^3 = y_2^3 \rightarrow y_1 = y_2 \checkmark$	۴
الف)  ب)  ج)  د) 	۵

الف)  ب) 	ج)  د)  ٦
الف)  ب) 	ج)  د)  ٧
	 ٨
	 ٩
الف) $\frac{1}{6}$ ب) $\frac{1}{3}$ ج) $\frac{1}{2}$ د) $\frac{1}{3}$	 ١٠