

۱۶۱۵

کلاس و جمع ما

نام و نام خانوادگی: هستی نادانی تکلیف شماره: ۳

$$\left. \begin{aligned} y_1^3 - n_1 &= 2n_1^2 \\ y_2^3 - n_2 &= 2n_2^2 \end{aligned} \right\} \begin{aligned} n_1 &= n_2 \\ y_1^3 &= y_2^3 \rightarrow y_1 = y_2 \end{aligned} \quad \checkmark$$

ب) $n=1$
 $|y|+1=4 \quad \alpha$
 $|y|=3 \rightarrow y=\pm 3$

ج) $\sqrt{n-4}+|y-2|=0$
 $n=4$
 $y=2 \quad \checkmark$

د) $x=0 \quad \alpha$
 $y=\frac{\pi}{2}, \frac{3\pi}{2}$

الف) $y=1$ غلط است ①

ب) $y=2n$ غلط است

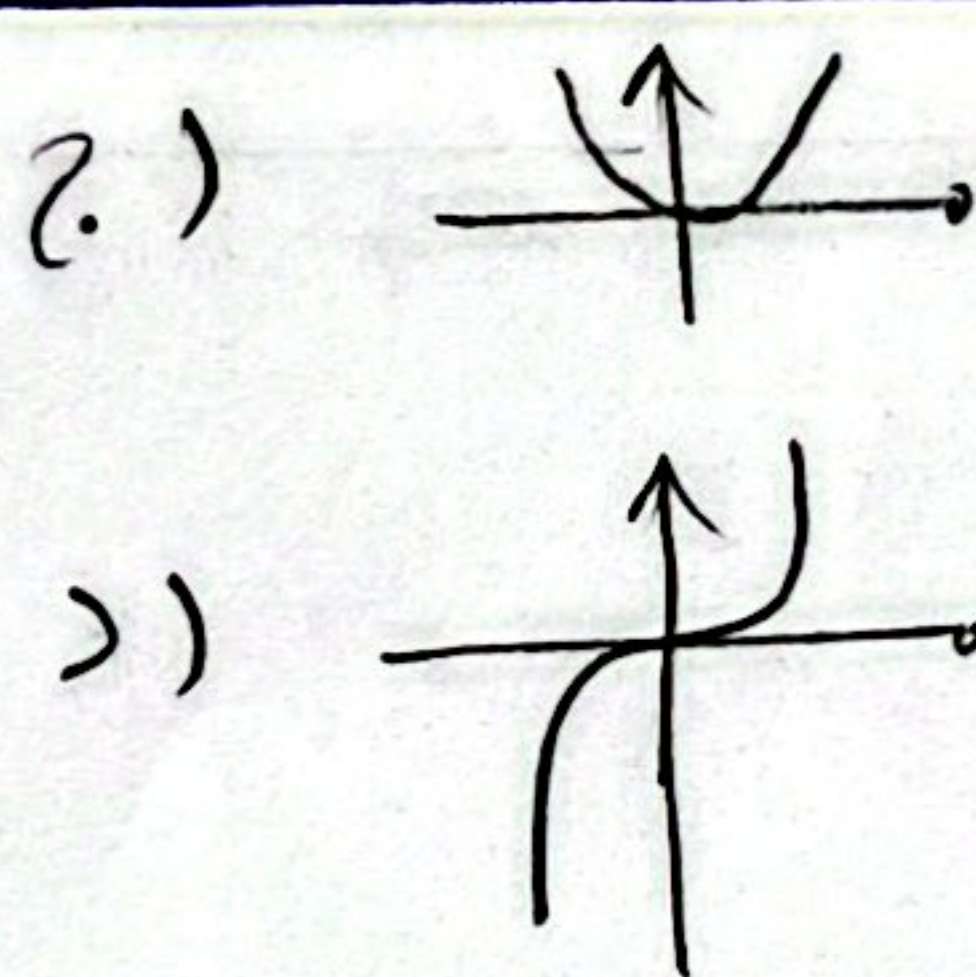
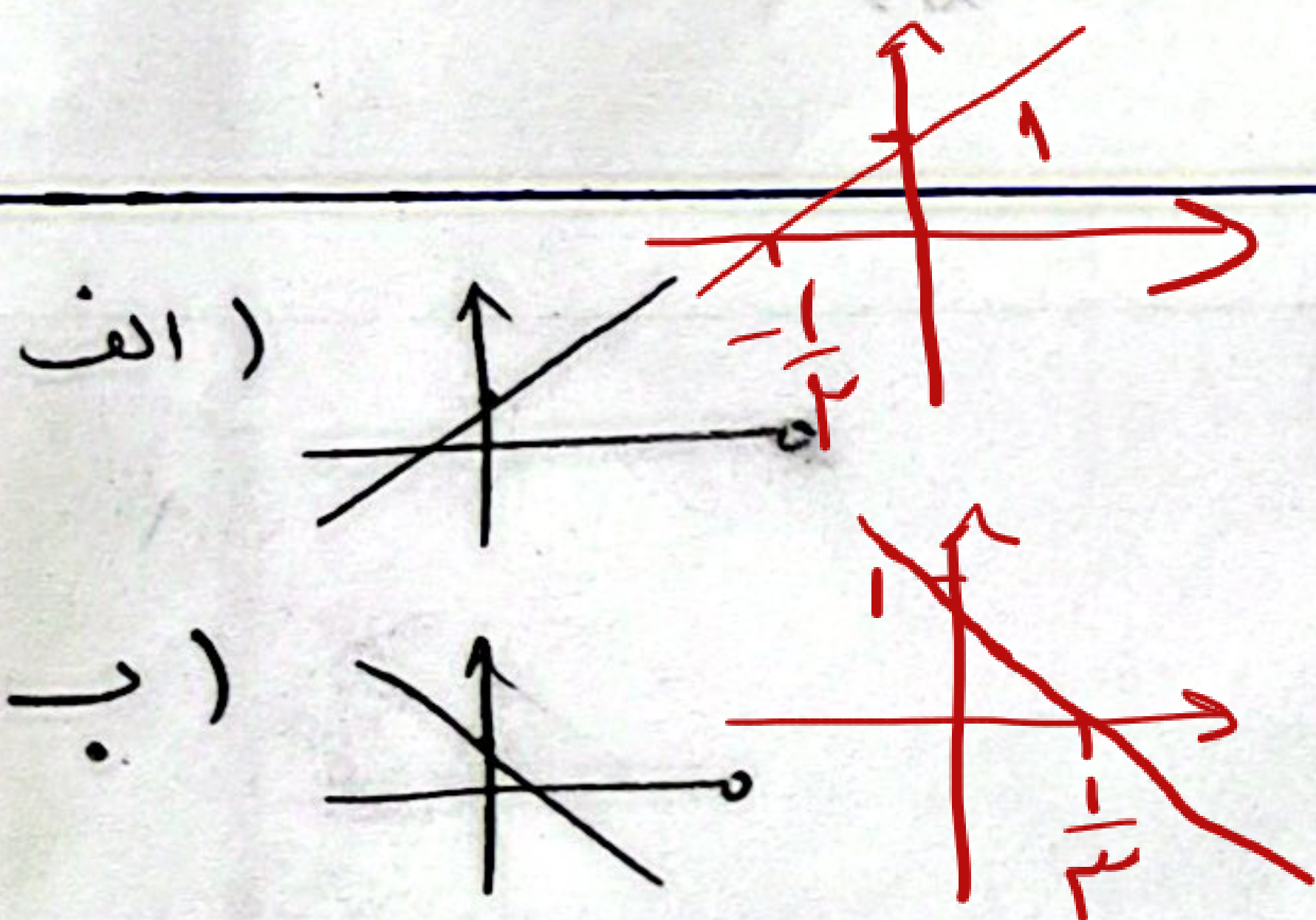
الف) $y=an+b \rightarrow a=1, b=0 \rightarrow 1+0=1$

ب) $y=n^2+an+b$

$n = \frac{-b}{2a} = \frac{-a}{2} = 2 \rightarrow -a=4 \rightarrow a=-4$

$y = \frac{-\Delta}{4a} \rightarrow \frac{-b^2+4ac}{4a} = \frac{-a^2+4b}{4} = 1 \rightarrow -14+4b=4$
 $4b=18 \rightarrow b=4.5$

$-4+2(0)=9$

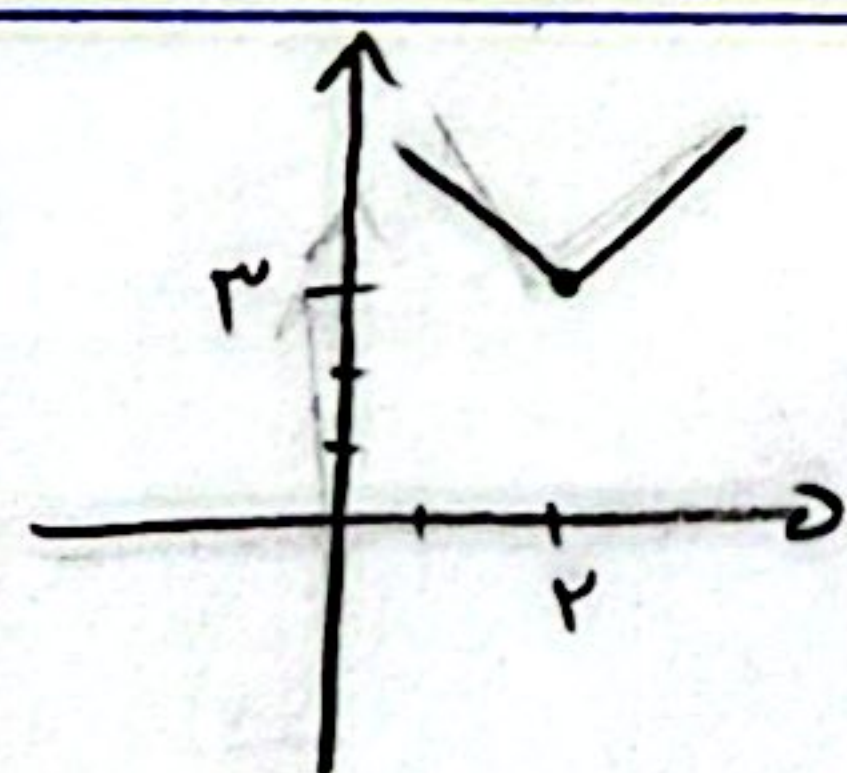
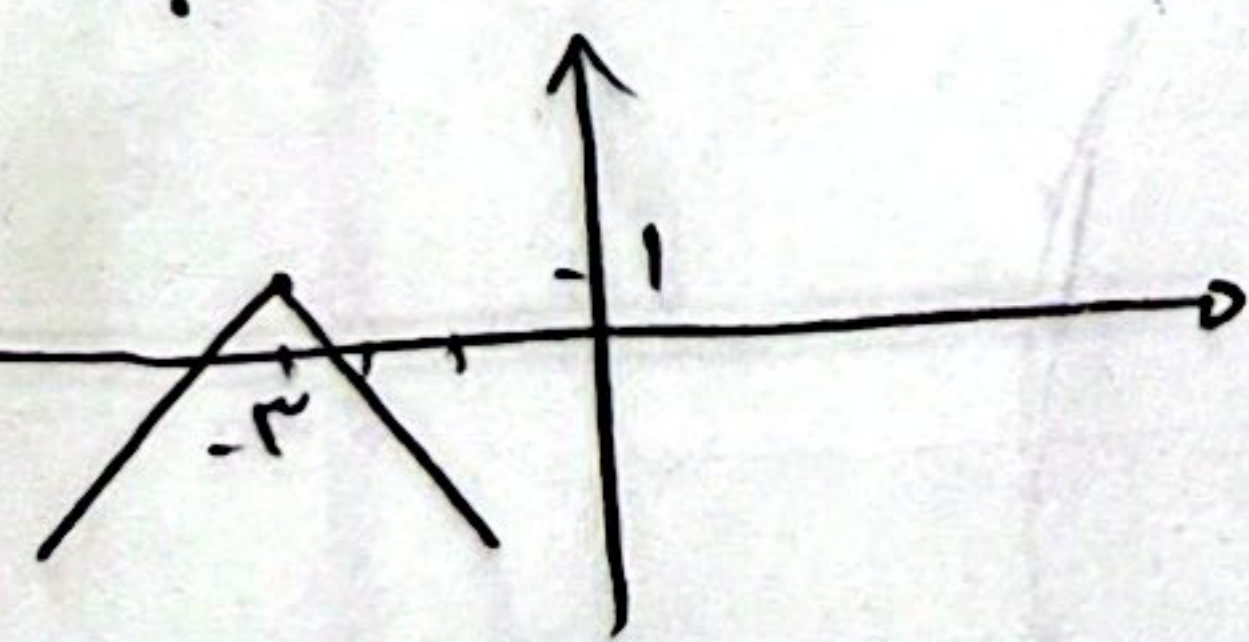


اعداد روی نمودارها
 قضا باید مشخص
 شوند

۱۶۱۵

الف) $y=|n-2|+3$

ب) $y=-|n+3|+1$



$n^2-4n \neq 0 \rightarrow n(n-4) \neq 0 \rightarrow n \neq 0$
 $n \neq 4$

الف) $y = \frac{n+4}{n^2-4n}$
 $n \neq -4$
 $n \neq 4$
 $n \neq 0$

$D_f = \mathbb{R} - \{0, 4\}$

ب) $y = \frac{n+4}{n^2-7n+14}$
 $n \neq -4$
 $n \neq 2$
 $n \neq 5$

ج) $y = \frac{n+4}{n^2+n+4}$
 $n^2(n^2-4) \neq 0 \rightarrow n \neq 2$
 $n \neq -2$

$\mathbb{R} = D_f$

د) $y = \frac{n+4}{n^2-4n^2}$
 $n \neq -4$
 $n \neq 2$
 $n \neq 0$

$D_f = [-4, -2) \cup (2, +\infty)$

$D_f = \mathbb{R} - \{0, \pm 2\}$

الف) $y = \sqrt{4-x} + \sqrt{x-2} \rightarrow \begin{cases} 4-x \geq 0 \\ 4 \geq x \end{cases} \quad \begin{cases} x-2 \geq 0 \\ x \geq 2 \end{cases}$

$D_f = [2, 4]$

ب) $y = \frac{x^2+1}{x^2+1} \quad R = \{1\} = D_f$

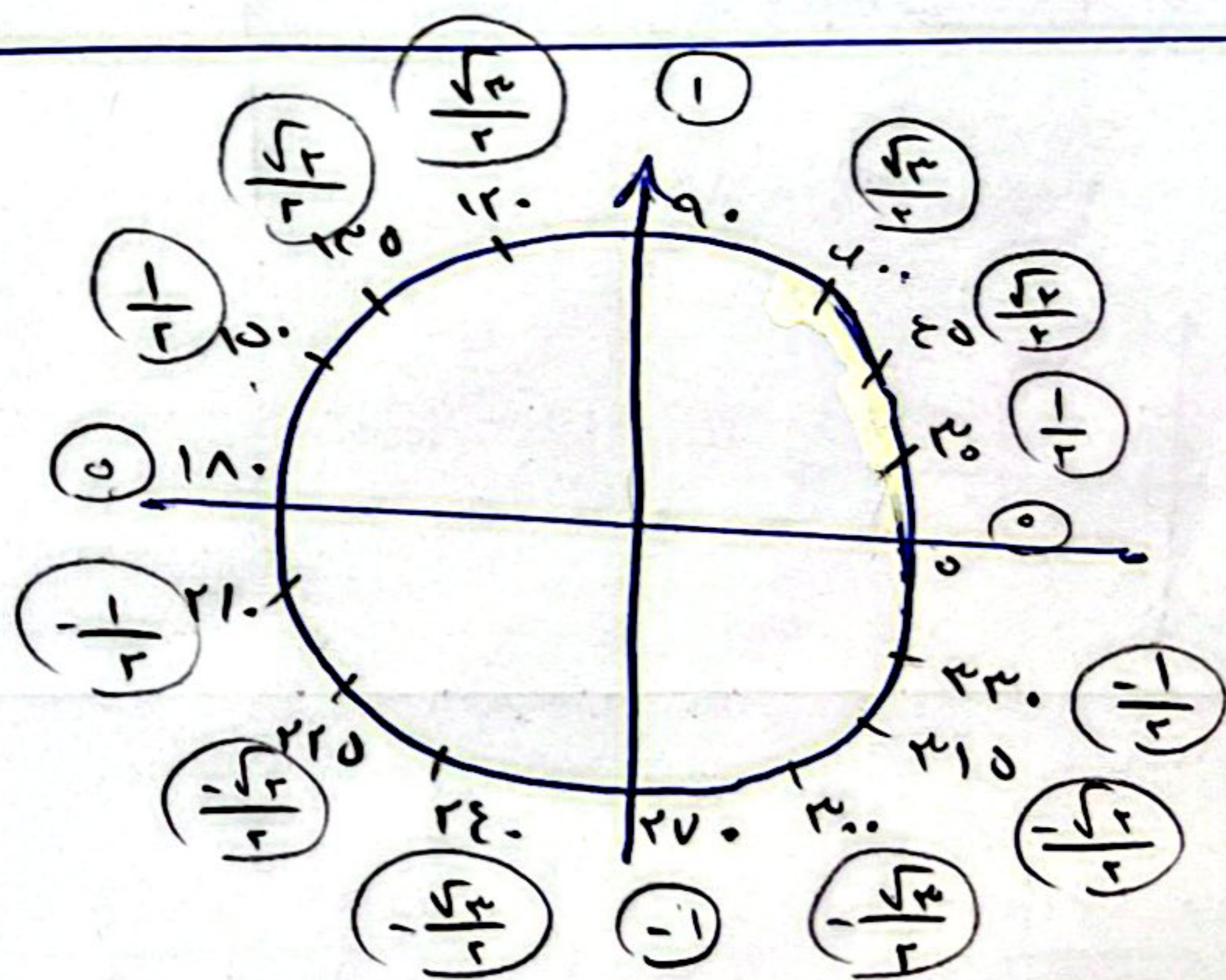
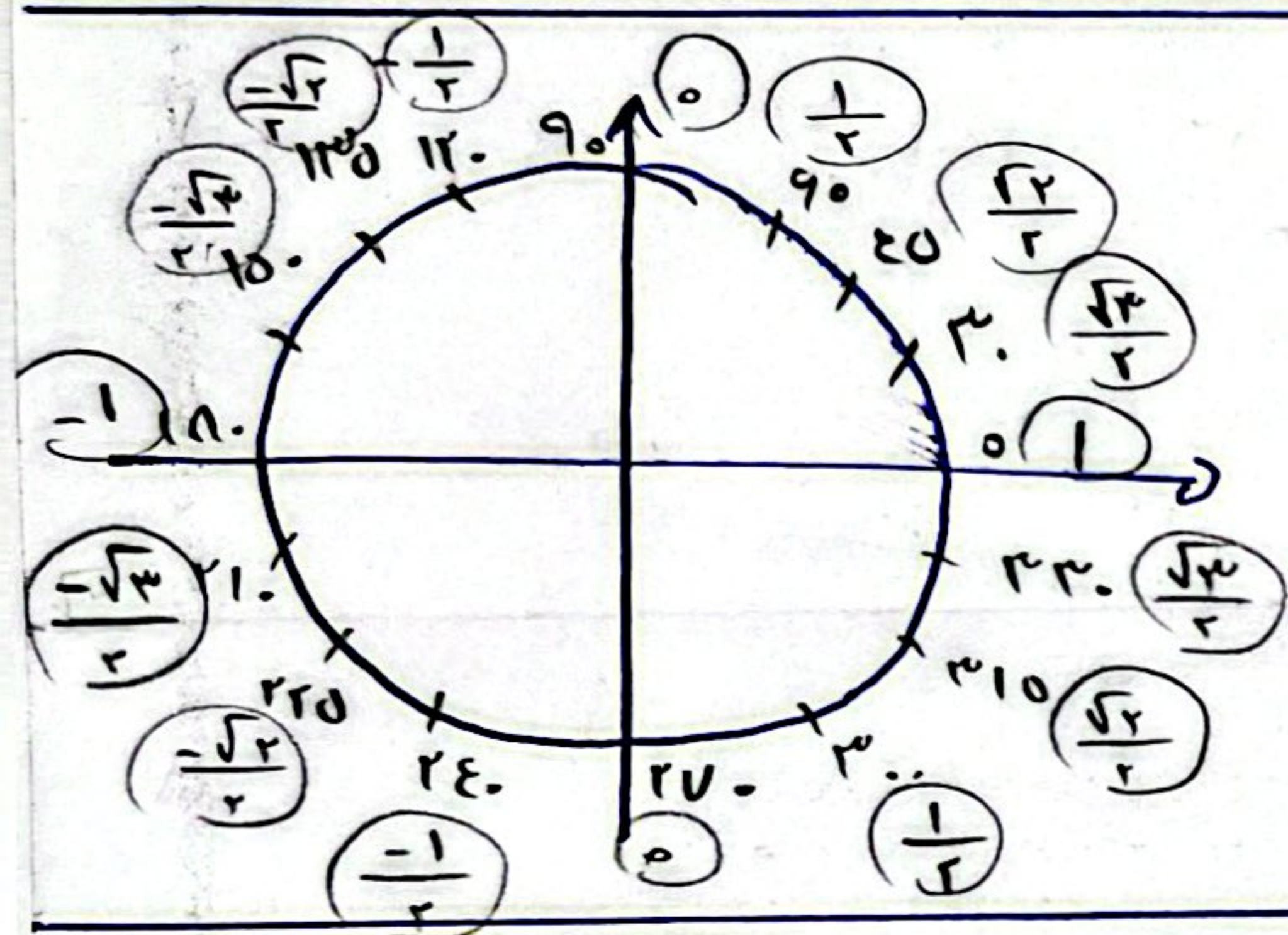
$x^2+1 \neq 0$
 $D_f = R$

ج) $y = \frac{\sqrt{x-2}}{x-2} \rightarrow \begin{cases} x=2 \\ x=2 \end{cases} \quad \frac{2}{2} - \frac{2}{2} +$

$D_f = (2, +\infty)$

$x-2 \geq 0 \rightarrow x \geq 2$
 $x-2 \neq 0 \rightarrow x \neq 2$
 $\rightarrow [2, +\infty) - \{2\}$

د) $y = \frac{x^2+3}{|x|+x^2} \rightarrow x \neq 0 \quad D_f = R - \{0\}$



الف) $\frac{2\pi}{3} = 120^\circ \rightarrow -\cos 120^\circ = \frac{1}{2} \quad \frac{2\pi}{3}, \frac{5\pi}{3}$

ب) $\frac{11\pi}{6} = 330^\circ \rightarrow -\cos 330^\circ = -\frac{\sqrt{3}}{2} \quad \frac{4\pi}{3}, \frac{5\pi}{3}$