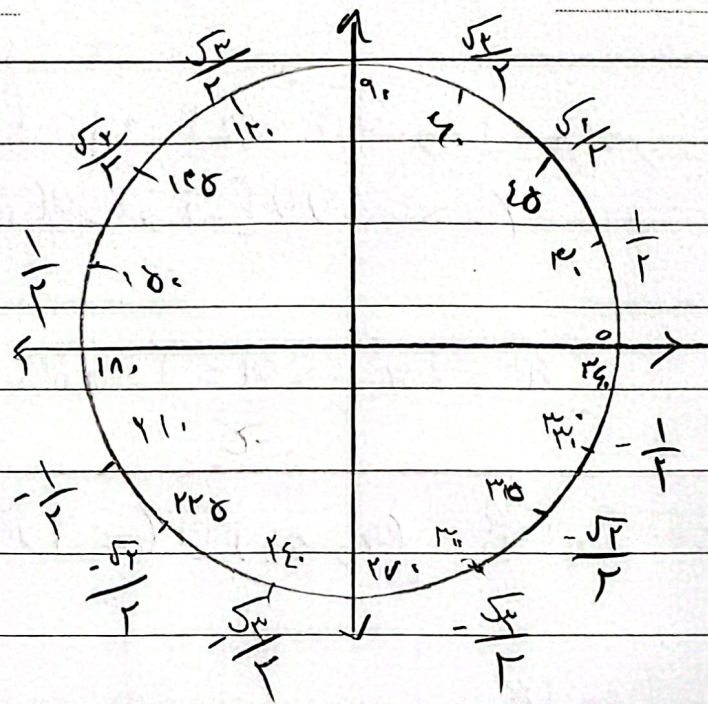




(9)

(10) الف) $\cos \frac{17\pi}{3} = -\frac{1}{2} \rightarrow \frac{1}{2} = \cos 60^\circ \rightarrow \sin 30^\circ \text{ و } 150^\circ$

ب) $\cos \frac{11\pi}{6} = \frac{\sqrt{3}}{2} \rightarrow -\frac{\sqrt{3}}{2} = \cos 240^\circ \rightarrow \sin 30^\circ \text{ و } 210^\circ$

$$y = \frac{x+2}{x^2+x+2} \rightarrow x = \pm 1, \sqrt{2} = \pm 2 + 1 - 1 + 1 - 1 + 2 \quad (2)$$

$$(-\infty, -1) \cup [-1, 1] \cup (1, \infty)$$

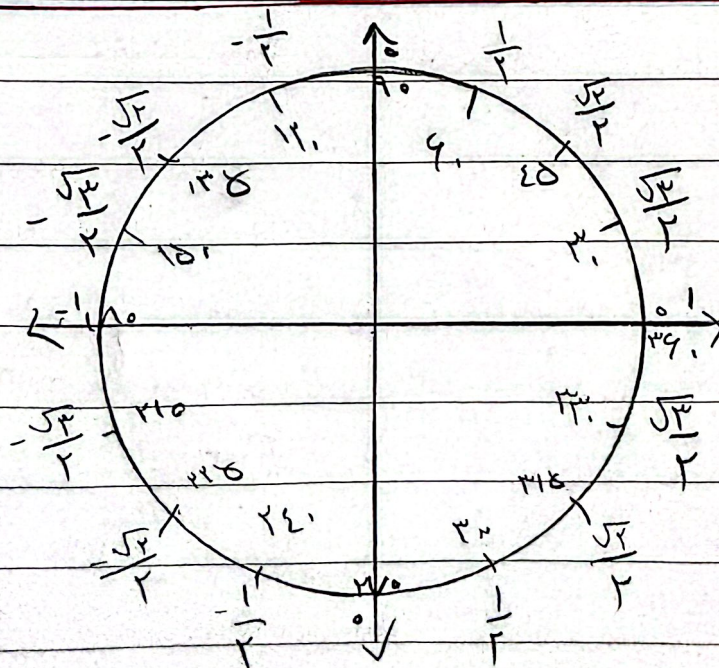
$$y = \frac{x+2}{x^2-2x^2} \rightarrow x^2 = 2x^2 \rightarrow x = 2 \rightarrow \mathbb{R} - \{2\} \quad (3)$$

$$y = \sqrt{4-x} + \sqrt{x-2} \rightarrow \mathbb{R} - (4, \infty) \cup (-\infty, 2) \quad (\text{الف}) \quad (4)$$

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

$$y = \frac{\sqrt{x-2}}{x-2} \rightarrow \mathbb{R} - (-\infty, 2) \cup (-\infty, 2) \quad (2)$$

$$y = \frac{2x+3}{|x|+x^2} \rightarrow \mathbb{R} \quad (ج)$$



(د)

☒ حبیب خسرو بانیال دروہ ج دھترانہ تکلف ۳ ۱ ۱ Date : _____

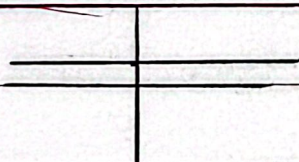
① الف) $\checkmark$ تابع است $y^3 = y = y = y$ $\left\{ \begin{array}{l} y_1^3 - u_1 = 2u_1^2 \\ y_2^3 - u_2 = 2u_2^2 \end{array} \right\} \xrightarrow{F} y = y = y = y$

$$u=1 \quad |y|+1=1^3 \rightarrow |y|+1=1 \rightarrow |y|=0 \quad (ب)$$

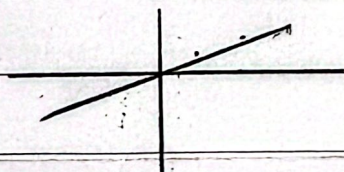
$$y = \pm 3 \text{ تابع نسبت}$$

$\sqrt{x-2} + |y-2| = 0 \rightarrow \sqrt{x} + |y-2| = 0 \rightarrow 2 + |y-2| = 0$ (ج
 $x=1$

$x = \cos y \rightarrow y = \frac{\pi}{2}, \frac{3\pi}{2}, \dots$ $\times$ تابع نیست (د)



② الف) $y=1$

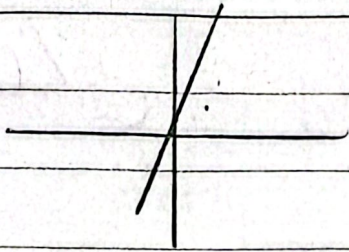


$$y = \frac{1}{2}x \quad (c)$$

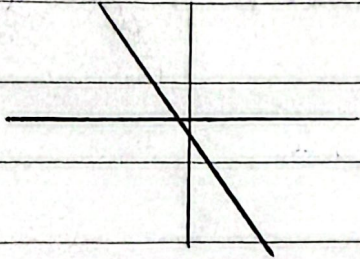
٣) الف) $y = \ln x + 0$ $1 + (y'x) = 1 \leftarrow$

مستقيم بار $a > 0$ | 2 | (ب)

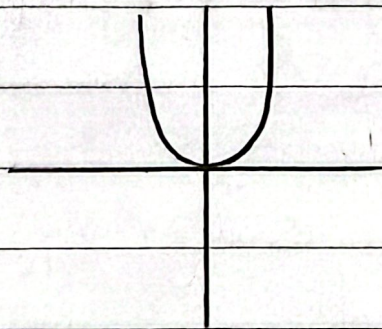
$$-\frac{b}{r_a} = 1, \quad -\frac{b' - \{ac}{r_a} = 1 \rightarrow \overbrace{b' - \{ac}^{b' = -\{a} = 1, \quad b' - \{ac = -\{a$$



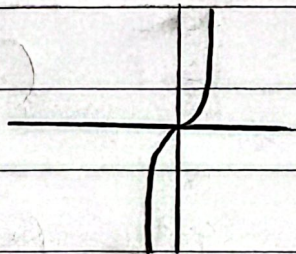
(د) الف



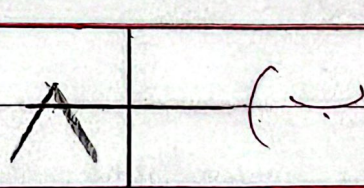
(ب)



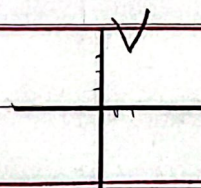
(ج)



(د)



(ب)



(أ) الف

$$y = \frac{x+2}{x-1} \rightarrow x \in \{x \rightarrow x \neq 1\}$$

$$\mathbb{R} - \{1\}$$

(ع) الف

(ب) 9