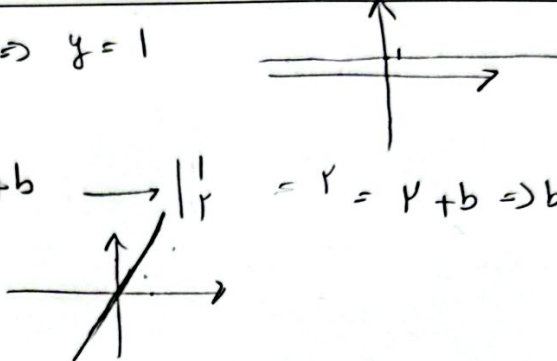
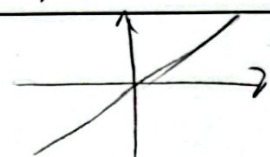
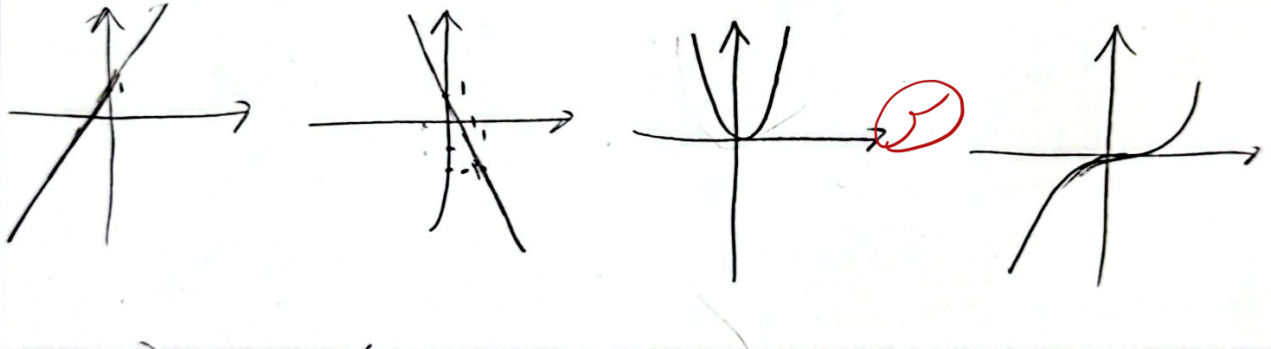
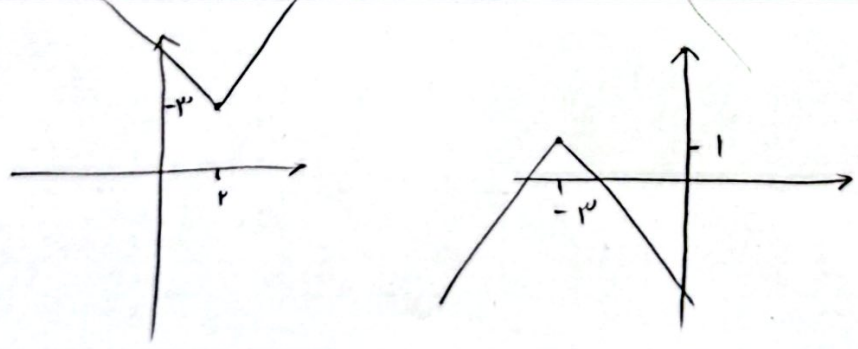
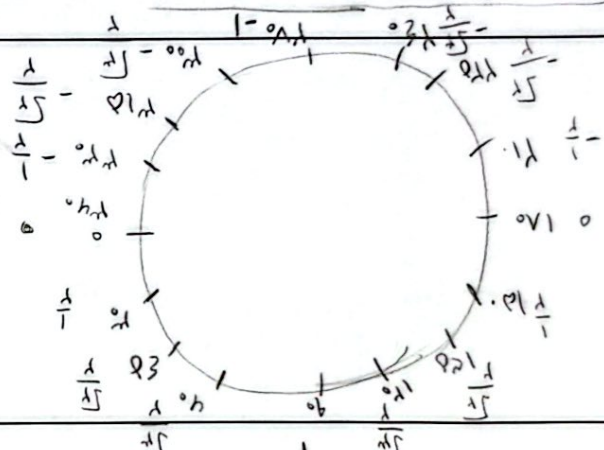
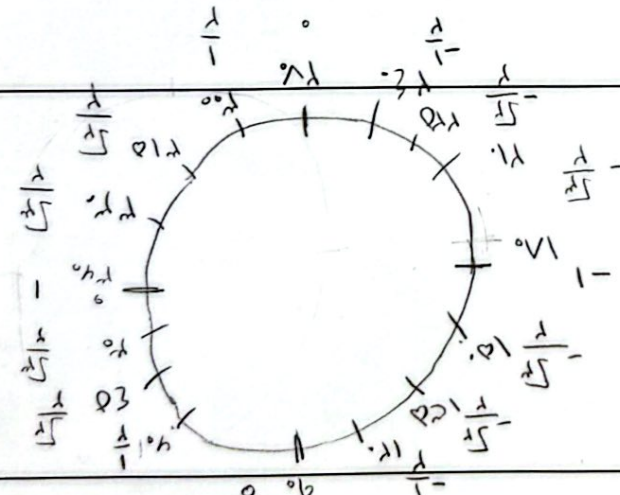


$y^3 - n = 2n^2 \Rightarrow y_1^3 = 2n_1^2 + 3n_1$ $y_2^3 = 2n_2^2 + 3n_2$ $n_1 = n_2 \Rightarrow y_1^3 = y_2^3 \Rightarrow y_1 = y_2$ تابع است $y + n^2 = n + 3 \xrightarrow{n=0} y = 3 \Rightarrow y = \pm 3$ تابع نیست $\sqrt{n-6} + y-1 = 0 \Rightarrow$ دو عدد منفی منفی می شوند $\Rightarrow y = 3$ تابع است $n = \cos y \xrightarrow{n=1} \cos y = 1 \Rightarrow y = 0, 2\pi, \dots \{2k\pi\}$ تابع نیست	1
$y = k$ تابع ثابت $y = 3 \Rightarrow y = 1$ $y = an + b$ تابع خطی $y = 2n$ $y = 2 = 2 + b \Rightarrow b = 0$ 	2
$y = an + b \rightarrow$ همان $1 + 2x_0 = 1$ $\min \Rightarrow a > 0$ $1 = (-1)^2 + (-1 \times -1) + b \Rightarrow b = -1$ $\frac{b}{2a} = 2 \Rightarrow \frac{n}{2} = 2 \Rightarrow \frac{a}{2} = 2 \Rightarrow a = -1$ $a + 2b = -1 + -1 \times 2 = -3$ 	3
	4
	5

$y = ns = \frac{-b}{2a} \rightarrow \frac{-a}{2} = 2 \rightarrow a = -4$
 $ys = 1 \rightarrow 1 = 4 - 4(2) + b \rightarrow b = 7$
 $a + 2b = 10$

1.	$\cos \frac{11\pi}{12} = \cos 165^\circ = \cos 180^\circ - 15^\circ = -\cos 15^\circ = -\frac{\sqrt{6}-\sqrt{2}}{4}$ $\sin \frac{11\pi}{12} = \sin 165^\circ = \sin 180^\circ - 15^\circ = \sin 15^\circ = \frac{\sqrt{6}+\sqrt{2}}{4}$
2.	 Unit circle diagram showing angles from 0 to 2pi and their corresponding sine and cosine values.
3.	 Unit circle diagram showing angles from 0 to 2pi and their corresponding sine and cosine values.
4.	$ a + a^2 \neq 0 \Rightarrow a \neq 0$ $a - 1 \geq 0 \Rightarrow a \geq 1 \quad \cup \quad a - 3 \neq 0 \Rightarrow a \neq 3$ $a^2 + 1 \neq 0 \Rightarrow a^2 \neq -1$ $4 - a \geq 0 \Rightarrow a \leq 4 \quad \cup \quad a - 1 \geq 0 \Rightarrow a \geq 1$ $D_f = [1, 4]$ $D_f = \mathbb{R}$ $D_f = [1, +\infty) - \{3\}$ $D_f = \mathbb{R} - \{0\}$
5.	$a^2 - 3a \neq 0 \Rightarrow a \neq 0, a \neq 3$ $\Delta = (-1)^2 - 4 \times 1 \times 4 = -15 < 0 \Rightarrow \text{no real roots}$ $\Delta = (1)^2 - 4 \times 1 \times 4 = -15 < 0 \Rightarrow \text{no real roots}$ $D_f = \mathbb{R}$ $D_f = \mathbb{R}$ $D_f = \mathbb{R} - \{0, 3\}$