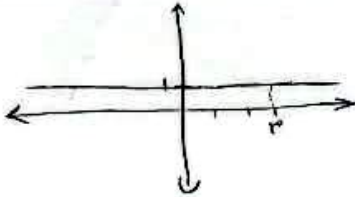
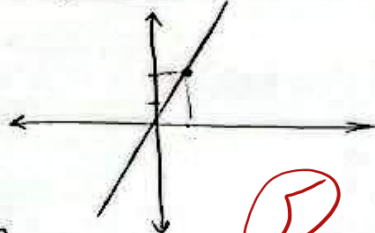
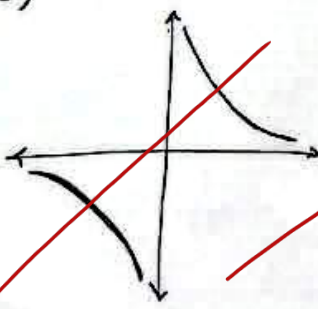
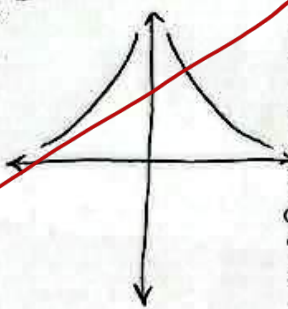
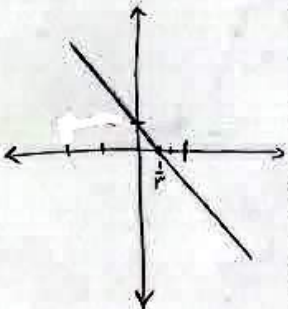
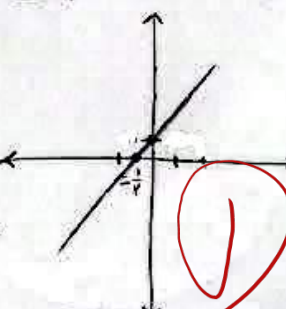
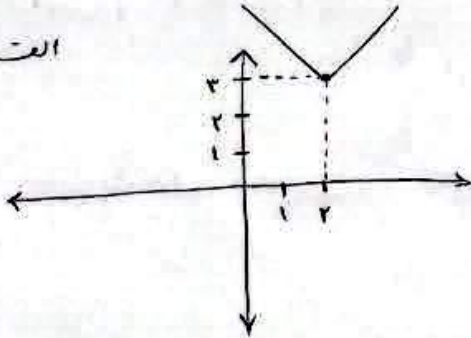
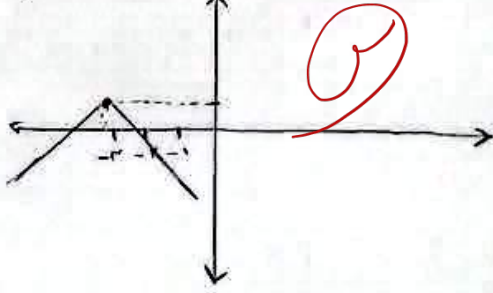
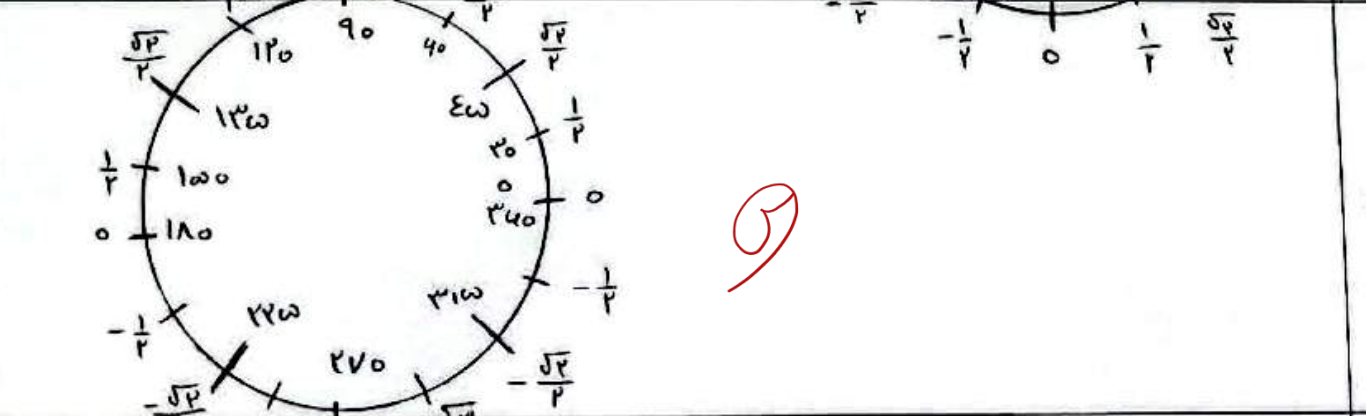
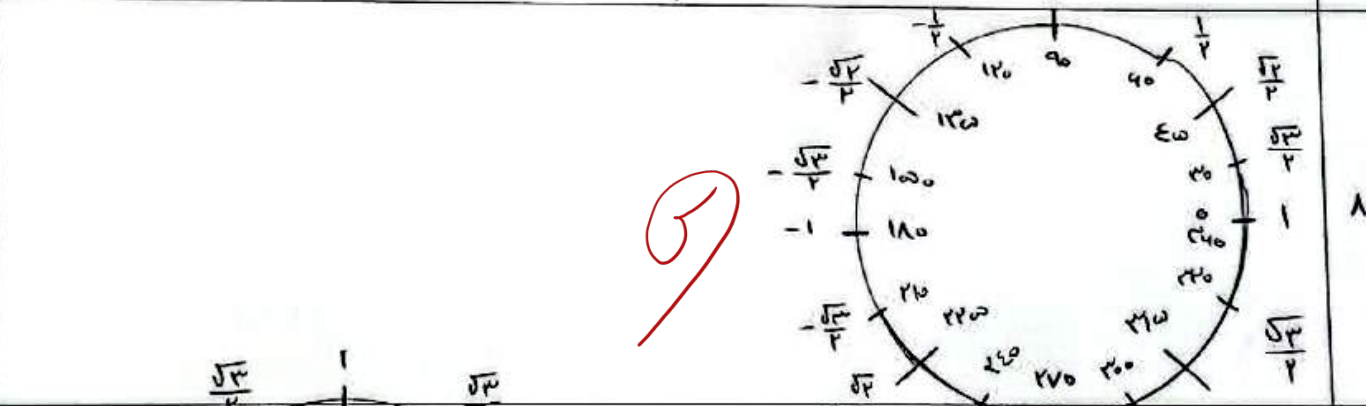


تابع X د) $u = \cos y$ $0 = \cos y$ در $\frac{\pi}{2}$ و $\frac{3\pi}{2}$ کسینوس صفر می‌شود	تابع Y ع) $\sqrt{x-1} + y-2 = 0$ $x = 1$ $y-2 = 0$ $y = 2$	تابع X ب) $y = x + 3 - x^2$ $x = 1$ $y = 1 + 3 - 1$ $y = 3$ $y = 3$ و $y = -3$	تابع Y الف) $y_1' = 2x^2 + 2x$ $y_2' = 2x^2 + 2x$ $x_1 = x_2$ $y_1' = y_2'$ $y_1 = y_2$ ۱/۵	۱
الف)  $y = k \rightarrow y = 1$	ب)  $y = 2x + 0$	۲		
الف) $y = ax + b \xrightarrow{\text{تبدیل}} y = x$ $a + 2b = 1 + 2(0) = 1 + 0 = 1$	ب) $a + 2b = 2 + 2(-1) = 2 - 2 = 0$ $y = ax + b + x^2$ $a = -\frac{b}{2} = 1 \rightarrow b = -2a = -2$ $1 = a(2) + (-2a) + (2)^2$ $1 = 2a - 2a + 4 \rightarrow 1 = 4$ $a = 1$	۳		
د) 	ع) 	ب) 	الف) 	۴
الف) 	ب) 	۵		

الف) $z^2 - \varepsilon z \neq 0$ $z(z - \varepsilon) \neq 0$ $\boxed{z = \varepsilon} \leftarrow \boxed{z = 0}$ $D_f = \mathbb{R} - \{0, \varepsilon\}$	ب) $z^2 - \sqrt{2}z + 1 \neq 0$ $\Delta = b^2 - 4ac$ $\Delta = (-\sqrt{2})^2 - 4(1)(1)$ $\Delta = 2 - 4 = -2$ $D_f = \mathbb{R}$	ج) $z^2 + z + \varepsilon$ $\Delta = b^2 - 4ac$ $\Delta = (1)^2 - 4(1)(\varepsilon)$ $\Delta = 1 - 4\varepsilon = -1$ $D_f = \mathbb{R}$	د) $z^2 - \varepsilon z^2 \neq 0$ $z^2(z^2 - \varepsilon) \neq 0$ $z^2(z - 1)(z + 1) \neq 0$ $z \neq 1, -1, 0$ $D_f = \mathbb{R} - \{-1, 0, 1\}$	6
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هـ) $4 - z \geq 0$ $z \leq 4$ $z - 2 \geq 0$ $z \geq 2$ $D_f = [2, 4]$	و) جميع الأعداد الحقيقية $D_f = \mathbb{R}$	ز) $z - 2 \geq 0$ $z \geq 2$ $z - \varepsilon \neq 0$ $z \neq \varepsilon$ $D_f = [2, \varepsilon) \cup (\varepsilon, +\infty)$	ح) $12z + z^2 = 0 \rightarrow \boxed{z = 0}$ $D_f = \mathbb{R} - \{0\}$	7
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الف) $\frac{\pi}{4}, \frac{5\pi}{4} \leftarrow \text{المحاور}$
 ب) $\frac{\pi}{3}, \frac{2\pi}{3} \leftarrow \text{المحاور}$

$$ج) \sqrt{x-2} + |y-2| = 0$$

سوال ۱

جمع ۲ عبارت نامنفی

تابع است

$$x-2=0 \rightarrow x=2$$

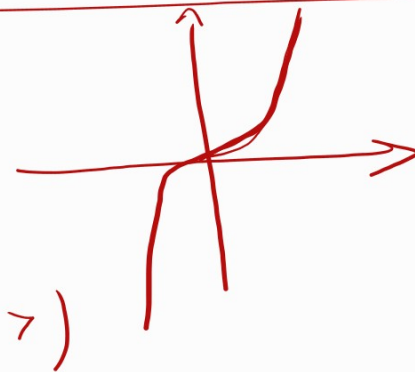
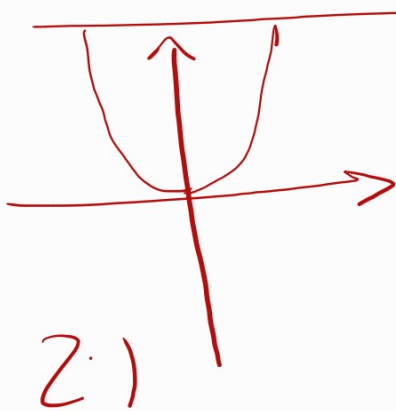
$$y-2=0 \rightarrow y=2$$

$$x_s = \frac{-b}{2a} = \frac{-a}{2} = 2 \rightarrow a = -2$$

سوال ۳

$$y_s = 1 \rightarrow 1 = (2)^2 - 2(2) + b \rightarrow b = 5$$

$$a + 2b = 9$$



سوال ۴