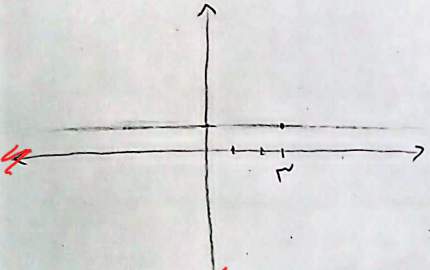
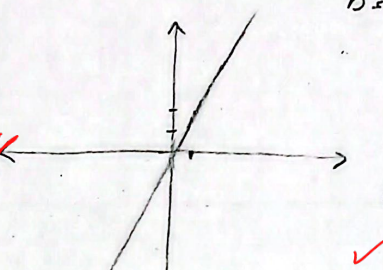
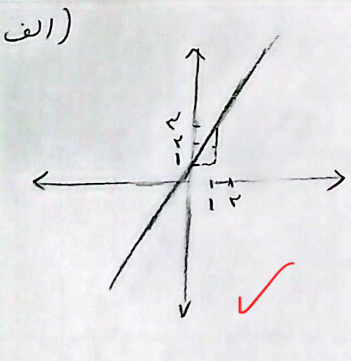
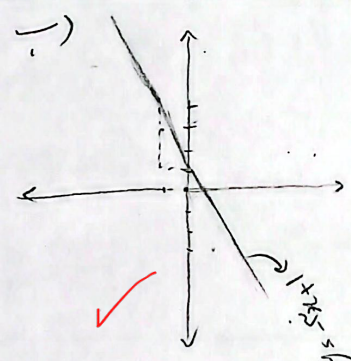
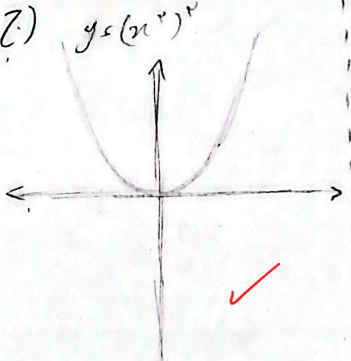
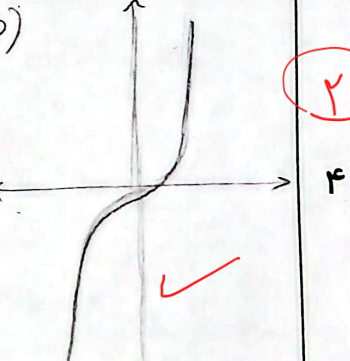
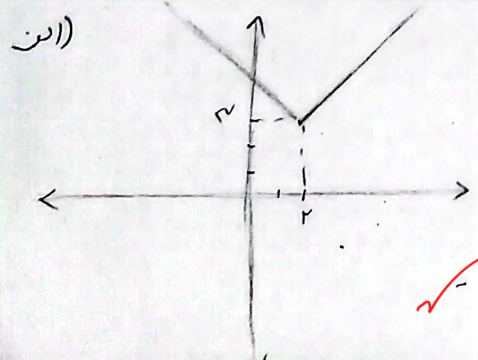
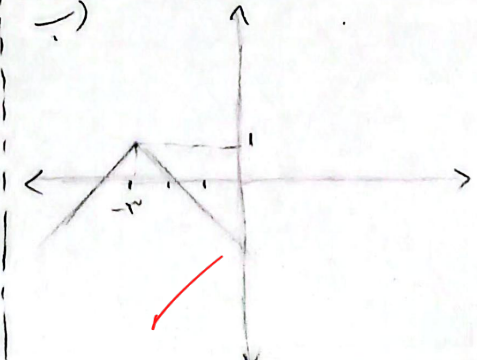
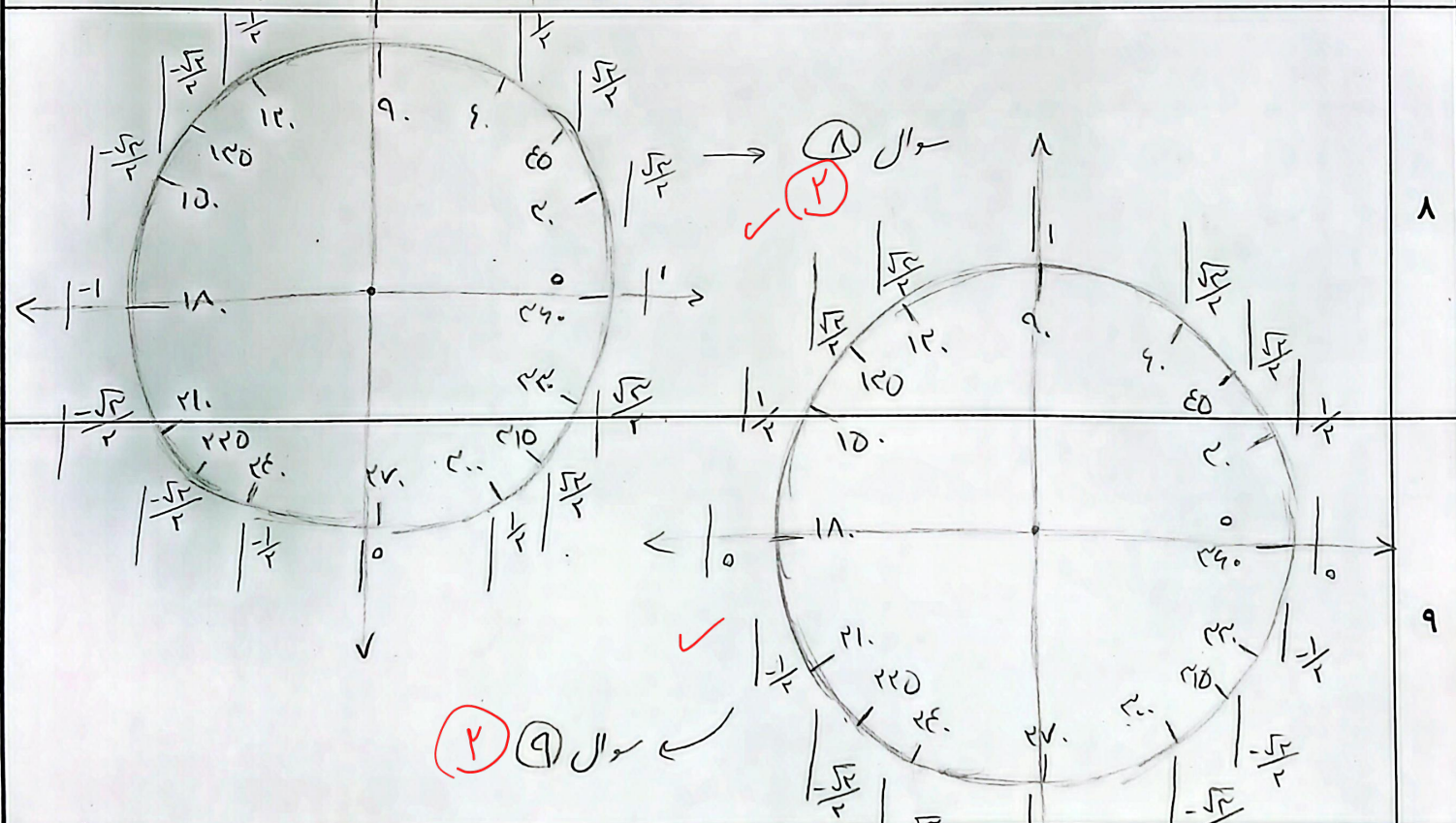


الف) $y_1^3 - x_1^2 = 2x_1^2$ $y_2^3 - x_2^2 = 2x_2^2$ $\xrightarrow{x_1 = x_2}$ $y_1^3 = y_2^3$ $\rightarrow y_1 = y_2$ تابع مت ب) $x \leq 0$ $y \leq 3$ $y \leq \pm 3$ تابع مت ج) $y = 2x$ $\rightarrow y = 2$ $x = 4$ تابع مت منحنی مستقیم $\rightarrow$ منحنی منحنی	د) $x \leq 0$ $\cos y \leq 0$ $y = 90^\circ, \frac{\pi}{2}, \frac{3\pi}{2}$ تابع مت ۲
الف)  $y = 1$	ب) $y = ax + b \rightarrow 2 \leq 2(1) + b$ $b \leq 0$  $y \leq 2x$ ۲
الف) $y = x$ $\rightarrow$ همانی $b \leq 0$ $a + \frac{b}{a} = a \leq 1$	ب) Min $\begin{cases} -\frac{b}{2a} \leq 2 \\ -\frac{a}{2} \leq 2 \\ a \leq -4 \end{cases}$ $\checkmark$ $y = x^2 + ax + b$ $x = 2, y = 1$ $1 \leq 4 - 4 + b$ $0 \leq b$ $-4 + 2(0) \leq 4$ ۲
الف)  $y = x$	ب)  $y = x + 1$ ج) $y = (x^2)^2$  د)  ۲
الف) 	ب)  ۲

الف) $x+4$ x^2-4x $x(x-4)=0$ $x=0$ ✓ $x=4$	ب) $\Delta \Rightarrow (-4)^2 - 4(1)(4) = 0$ مميز واحد $D_f = \mathbb{R}$ ✓	ج) $\Delta \Rightarrow (1)^2 - 4(\varepsilon) \rightarrow 0$ $D_f = \mathbb{R}$ ✓	د) $x(x^2-4)$ $x=0$ $x^2=4$ ✓ $x=\pm 2$ $D_f = \mathbb{R} - \{0, \pm 2\}$	٢ ٦
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الف) $4-x \geq 0$ $4 \geq x$ $x-2 \geq 0$ $x \geq 2$ ✓ $D_f = [2, 4]$	ب) $x^2+1=0$ $x^2=-1 \rightarrow \emptyset$ $D_f = \mathbb{R}$ ✓	ج) $x-2 \geq 0$ $x \geq 2$ $x-4 \leq 0$ $x \leq 4$ ✓ $D_f = [2, +\infty) - \{4\}$	د) $ x + x^2 \neq 0$ $\oplus \oplus$ ✓ $D_f = \mathbb{R} - \{0\}$	٢ ٧
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$\cos \frac{2\pi}{4} = -\frac{1}{2} \xrightarrow{\text{قرينة}} \frac{1}{2}$ $\sin x = \frac{1}{2} \rightarrow \left\{ \frac{5\pi}{6}, \frac{\pi}{6} \right\} \rightarrow$ الف ✓	٢
ب) $\cos \frac{11\pi}{4} = \frac{\sqrt{2}}{2} \xrightarrow{\text{قرينة}} -\frac{\sqrt{2}}{2}$ $\sin x = -\frac{\sqrt{2}}{2} \rightarrow \left\{ \frac{5\pi}{4}, \frac{3\pi}{4} \right\}$ ✓	١٠