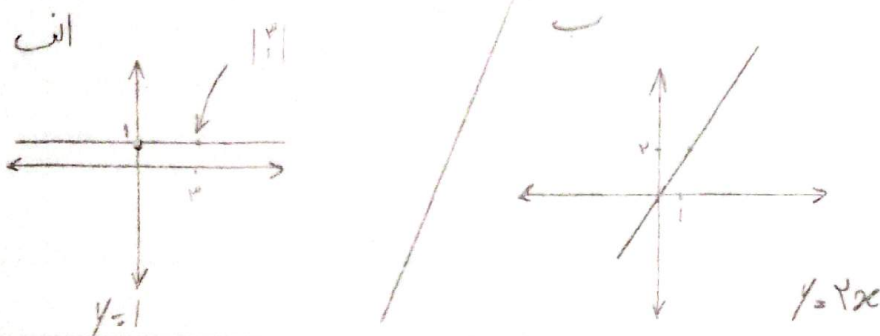
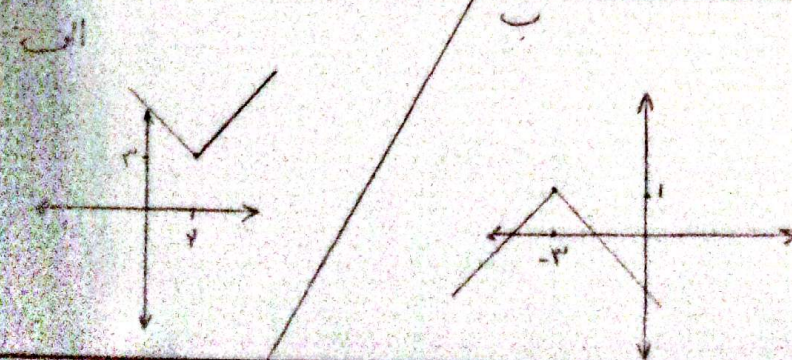
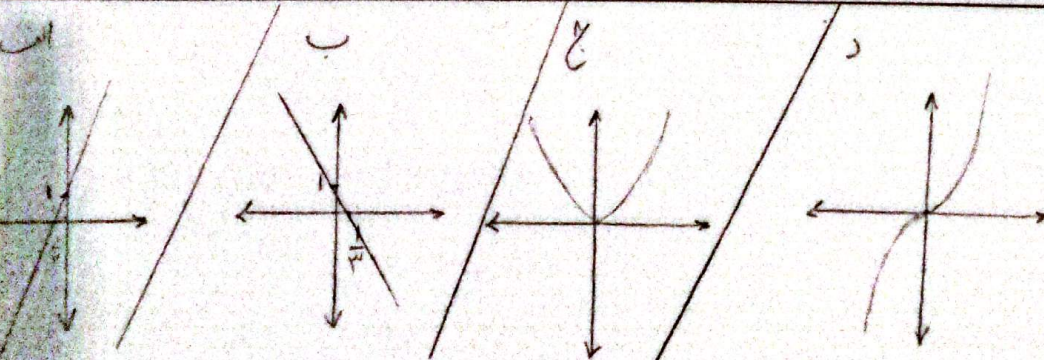


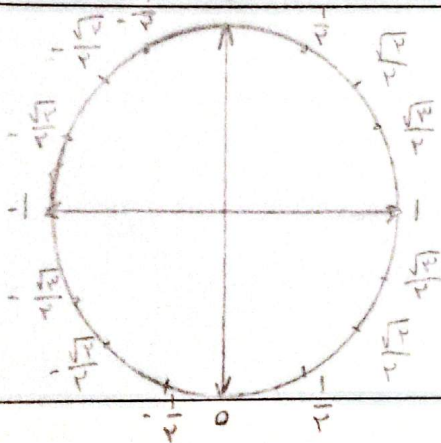
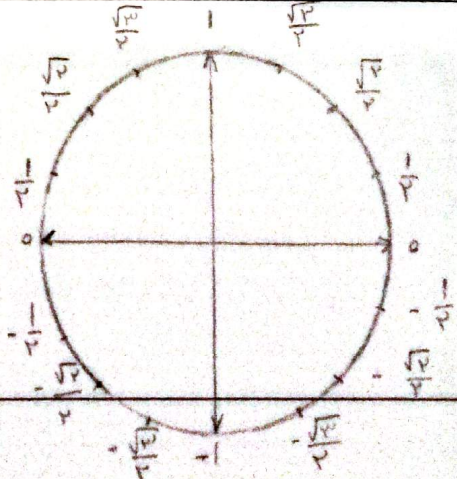
نام و نام خانوادگی پاسخنامه تشریحی تکلیف شماره ۳ کلاس A

الف $y^3 - x = 2x^2$ $y^3 - x' = 2x'$ $x = x'$ $\downarrow$ $y^3 = \sqrt[3]{x}$ $y = \sqrt[3]{x}$ تابع نیست	ب $x = 0$ $ y = 3$ $y = \pm 3$ $\downarrow$ تابع نیست	ج $x = 4$ $ y - 2 = 0$ $y = 2$ تابع است	د $x = 0$ $\cos y = 0$ $y = \frac{\pi}{2}, \frac{3\pi}{2}$ تابع نیست
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الف $f(x) = ax + b$ $x = ax + b$ $\downarrow$ $a = 1$ $b = 0$ $a + 2b = 1$	ب $\frac{-a}{2} = 2$ $-a = 4$ $a = -4$ $\Rightarrow a + 2b = -4 + 0 = -4$ $x^2 - 4(x) + b = 1$ $b = 5$
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الف $x^2 - 4x \neq 0$ $x(x-4) \neq 0$ $x \neq 4$ $D = \mathbb{R} - \{4, 0\}$	ب $x^2 - \sqrt{x+1} \neq 0$ $\Delta < 0$ $D = \mathbb{R}$	ج $x^2 + x + 4 \neq 0$ $D = \mathbb{R}$	د $x^2 - 4x^2 \neq 0$ $x^2(x-2)(x+2) \neq 0$ $x \neq 2, -2$ $D = \mathbb{R} - \{2, -2, 0\}$	٩
الف $4-x \geq 0$ $x \leq 4$ $x-2 \geq 0$ $x \geq 2$ $2 \leq x \leq 4$	ب $x^2 + 1 \neq 0$ $D = \mathbb{R}$	ج $x-2 \geq 0$ $x \geq 2$ $x-4 \neq 0$ $x \neq 4$ $[2, \infty) - [4]$	د $ x + x^2 \neq 0$ $D = \mathbb{R} - \{0\}$	٧
				٨
				٩
الف $\cos \frac{\pi}{3} = \frac{1}{2}$ $+\frac{1}{2} = \sin \frac{\pi}{6}, \frac{5\pi}{6}$ $(2k\pi + \frac{\pi}{6}), (2k\pi + \frac{5\pi}{6})$	ب $\cos \frac{11\pi}{6} = \frac{\sqrt{3}}{2}$ $-\frac{\sqrt{3}}{2} = \sin \frac{4\pi}{3}, \frac{5\pi}{3}$ $(2k\pi + \frac{4\pi}{3}), (2k\pi + \frac{5\pi}{3})$			١٠