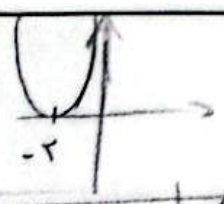
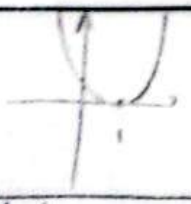
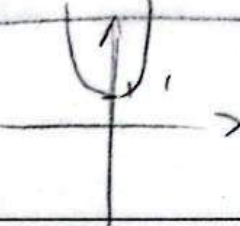
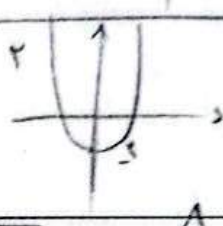
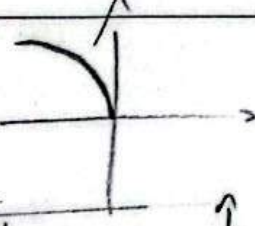
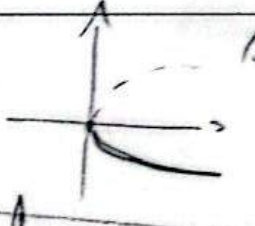
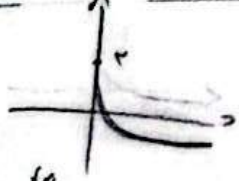
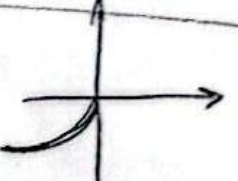
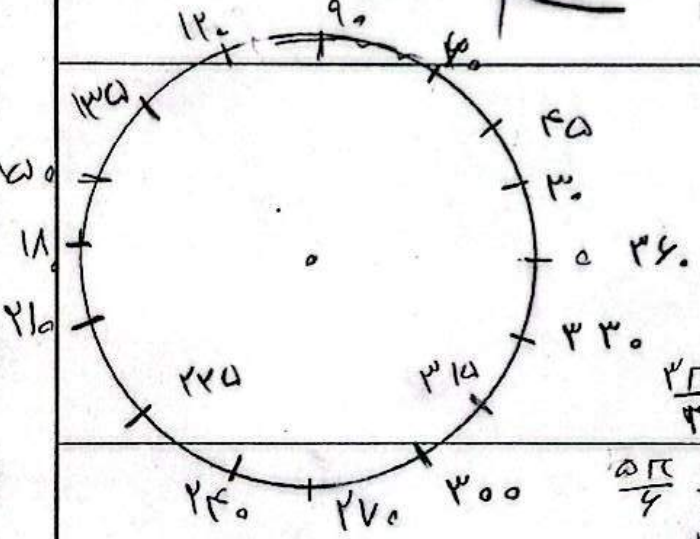
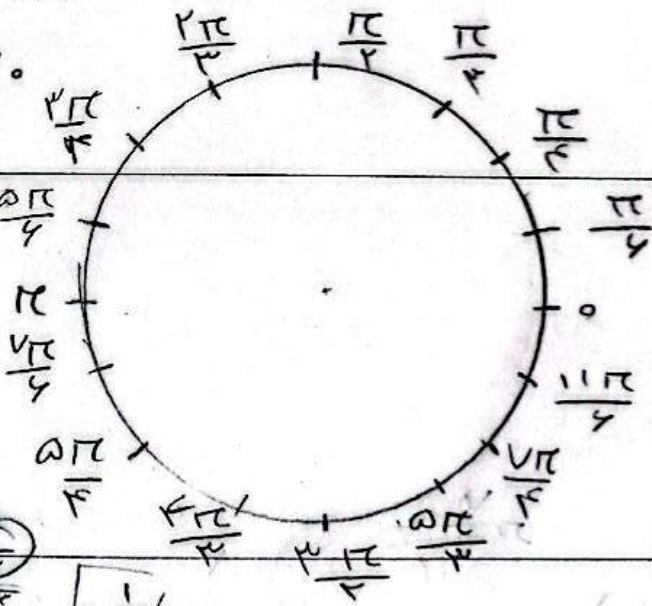
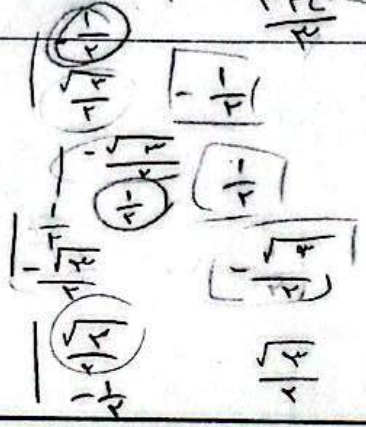


نام و نام خانوادگی پاسخنامه تشریحی تکلیف شماره ۲ کلاس دهم (دانشگاه جامع)

۱	$P = \{(1, 4a), (1, a^2 + 3), (2, 3a)\}$ $4a = a^2 + 3$ $a^2 + 3 - 4a = 0$ $(a+1)(a-3) = 0$ $\begin{matrix} a = -1 \\ a = 3 \end{matrix}$
۲	ب) $y = x$ (الف) تابع است ب) $y + \sqrt{x-1} = 0$ (ب) $\sqrt{x-1} = 0 \Rightarrow x=1$ تابع است
۳	الف) $y^2 - y = \frac{x}{2}$ $\sqrt{y^2 - y} = \sqrt{\frac{x}{2}}$ تابع نیست ب) $y-1 = \sqrt{x-2}$ $y-1 = \pm \sqrt{x-2}$ تابع نیست ج) $\sin^2 \frac{y}{2} + \cos^2 \frac{y}{2} = 1$ $1 + \cos^2 \frac{y}{2} = 1$ تابع نیست د) $\sqrt{xy} = x$ $x = 0$ $y = 1, 2, 3, 4, \dots \times$ تابع نیست
۴	الف) $x^2 + y-1 = 4x$ $y_1-1 = 4x_1 - x_1^2$ $y_2-1 = 4x_2 - x_2^2$ $x_1 = x_2$ $y_1 = y_2$ تابع نیست ب) $y^2 + 3x = 0$ $y_1^2 = -3x_1$ $y_2^2 = -3x_2$ $x_1 = x_2$ $y_1 = y_2$ تابع است
۵	الف) $y = \sqrt{x}$ فرد ب) $y = \frac{1}{\sqrt{x}}$ فرد ج) $y = \frac{1}{x^2}$ فرد د) $y = \frac{1}{x^3}$ فرد

$y = (x+2)^2$ 	$y = (x-1)^2$ 	
$y = x^2 + 1$ 	$y = x^2 - 2$ 	6
$y = \sqrt{-x}$ 	$y = -\sqrt{x}$ 	7
$y = -\sqrt{x} + 2$ 	$y = -\sqrt{-x}$ 	8
		9
ا) $\cos 120^\circ$ ————— ب) $\sin 100^\circ$ ————— ج) $\cos \frac{11\pi}{6}$ ————— د) $\sin \frac{11\pi}{6}$ —————		10