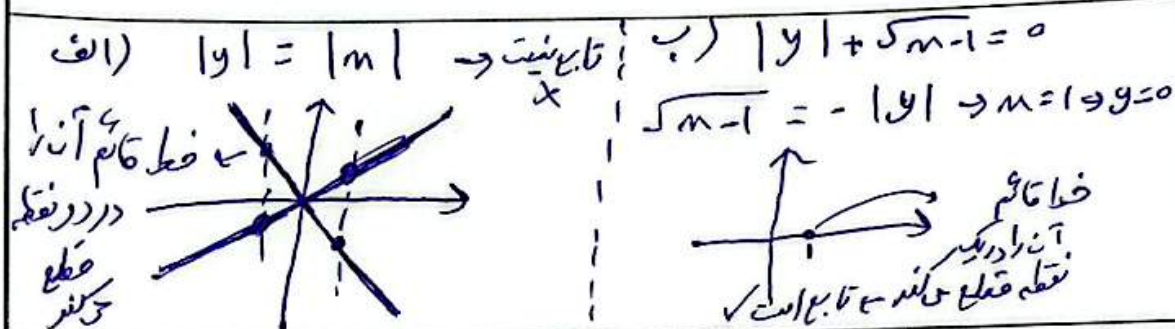


نام و نام خانوادگی تاریخ پاسخنامه تشریحی تکلیف شماره ۲ کلاس درس B

$$f(a) = a^2 + 3 \quad a^2 + 3 - 4a = 0 \quad a^2 - 4a + 3 = 0 \quad (a-1)(a-3) = 0$$

$a = 1 \text{ و } 3$



(الف) $|y-1| = \sqrt{m-2} \rightarrow m = 3 \rightarrow |y-1| = 1 \rightarrow y = 0 \text{ یا } 2$ تابع نیت

(ب) تابع نیت $y = \frac{m^2}{4} \rightarrow y^2 = m \rightarrow y = \pm \sqrt{m} \rightarrow |y-1| = \sqrt{m-2}$

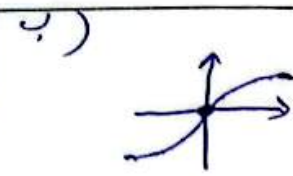
(ج) $\sin^2 m + \cos^2 \frac{y}{2} = 1 \xrightarrow{m=0} \sin^2 0 + \cos^2 \frac{y}{2} = 1 \rightarrow 0 + \cos^2 \frac{y}{2} = 1$ تابع نیت x

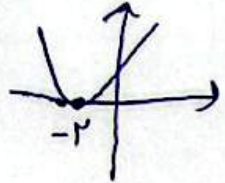
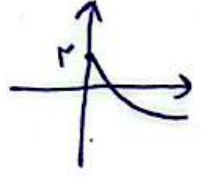
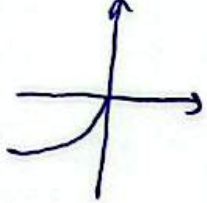
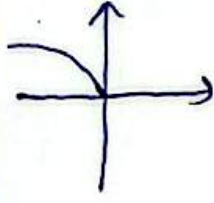
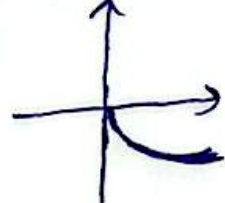
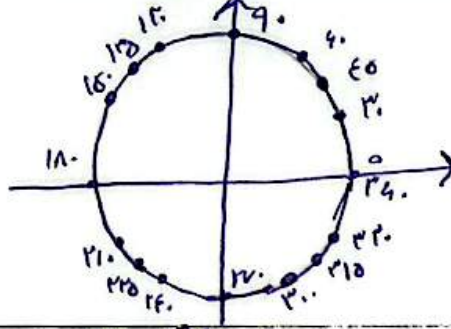
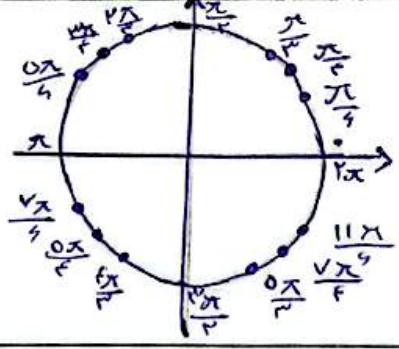
و هر دو می توانند باشند $m = 0 \rightarrow y = 0$ (د) $2my = m \rightarrow y = 0$ تابع نیت x

(الف) $m^2 + |y-1| = 4m \rightarrow |y-1| = 4m - m^2 \xrightarrow{m=1} |y-1| = 3$

x تابع نیت $y = 4 - m$

(ب) $y^2 + 3m = 0 \rightarrow \begin{cases} y_1^2 + 3m_1 = 0 \\ y_2^2 + 3m_2 = 0 \end{cases} \xrightarrow{m_1 = m_2} y_1^2 = y_2^2 \rightarrow y_1 = y_2$ تابع نیت ✓



$y = m^2 + 1$ (1)	$y = m^2 - 2$ (8)	$y = (m+2)^2$ (6)	$y = (m-1)^2$ (الف)	6
				
$y = -\sqrt{m} + 2$ (1)	$y = -\sqrt{-m}$ (2)	$y = \sqrt{-m}$ (4)	$y = -\sqrt{m}$ (الف)	7
				8
 				
الف) $\cos 120^\circ = \boxed{-\frac{1}{2}}$ ب) $\sin 150^\circ = \boxed{\frac{1}{2}}$				9
2.) $\cos \frac{5\pi}{3} = \cos 300^\circ = \boxed{\frac{1}{2}}$ 3.) $\sin \frac{11\pi}{5} = \sin 396^\circ = \boxed{-\frac{1}{2}}$				