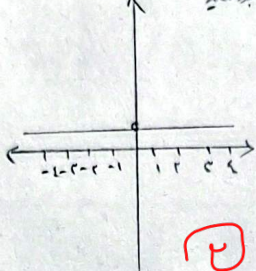
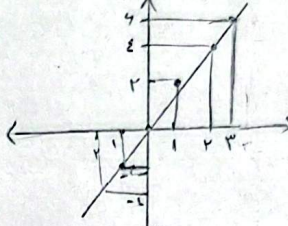
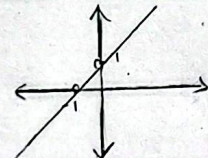
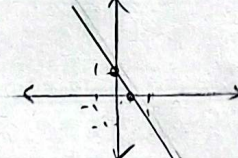
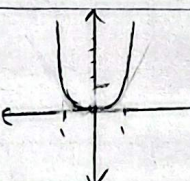
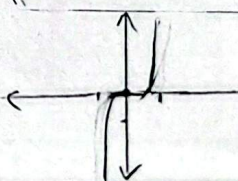
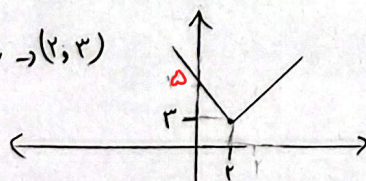
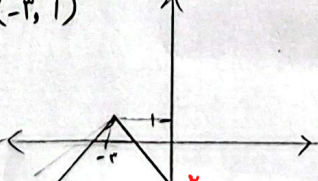


باید بی بارزایی یک x یک y داریم پس معادله است $y = \sqrt{2m^2 + n}$ الف ب) $y + n^2 = m + 3 \rightarrow y \cdot n + 3 - n^2 \Rightarrow y = \pm(m + 3 - n^2) \Rightarrow y = 3 \rightarrow y = 3$ $\rightarrow y = -3$ $\rightarrow y = 3$ $\rightarrow$ معادله نیست ج) $\sqrt{n-2} + y-2 = 0 \rightarrow \sqrt{n-2} = 0 \rightarrow n = 2$ $\rightarrow y-2 = 0 \rightarrow y = 2$ $\rightarrow (2, 2)$ $\rightarrow$ معادله است د) $n = \cos y \rightarrow m = 1$ $y = 0, 2\pi, -2\pi$ $\rightarrow$ معادله نیست	۱	
شماره y همیشه ثابت میماند (۱) $y = 1$ الف) $y \rightarrow f(m) = 1$ 	ب) $y = ax + b$ $y = 2m + b$ $f(m) = 2m$ $2 = 2(1) + b \Rightarrow b = 0$ 	۲
الف) $y = x$ $a = 1$ $b = 0$ $a + 2b = 1 + 2(0) = 1$	ب) $n \cos y = \frac{-a}{r} = 2 \rightarrow a = -2$ $\hookrightarrow m = 2$ $y = 1$ $1 = 2^2 + (-2)(2) + b$ $\rightarrow b = 5$ $1 = 2 - n + b \rightarrow b = 5$ $a + 2b = -2 + 2(5) = 8$	۳
$y = 2m + 1$ 	$y = -3m + 1$ 	۴
$y = m^2$ 	$y = n^2$ 	۵
الف) $n - 2 \leftarrow$ دو واحد به راست / $+3 \leftarrow$ سه واحد به بالا $(2, 3) \rightarrow$ اس 	اس و دو واحد به چپ / $+1 \leftarrow$ یک واحد به بالا / $(-3, 1) \rightarrow$ اس 	۵

الف) $m^2 - 2m = 0 \quad m(m-2) = 0 \quad m \in \{0, 2\} \quad D_f = \mathbb{R} - \{0, 2\} = (-\infty, 0) \cup (0, 2) \cup (2, +\infty)$

ب) $m^2 - 5m + 4 = 0 \quad \Delta = (-5)^2 - 4(1)(4) = 9$
 $2\alpha = \frac{5 \pm 3}{2} = 1, 4$

$D_f = \mathbb{R}$ مجال الدالة = المجال دالة كثيرة الحدود ناقصاً قيم المخرج

ج) $m^2 + m + 2 = 0 \quad \Delta = 1^2 - 4(1)(2) = 1 - 8 = -7$ $D_f = \mathbb{R}$

(2) ✓

د) $m^2 - 2m^2 = -3m^2 \rightarrow -3m^2 = 0 \quad m = 0 \quad D_f = \mathbb{R} - \{0\} = (-\infty, 0) \cup (0, +\infty)$

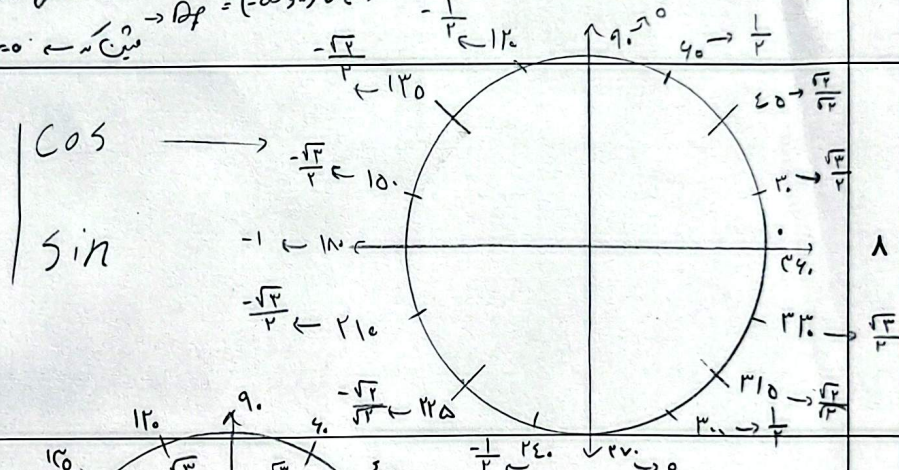
الف) 4. $m \geq 0 \rightarrow m \leq 4, \quad m - 2 \geq 0 \rightarrow 2 \leq m \leq 4 \quad D_f = [2, 4]$

ب) $m^2 + 1 \neq 0 \rightarrow m^2 \geq 0 \Rightarrow m^2 + 1 > 0 \quad D_f = \mathbb{R}$

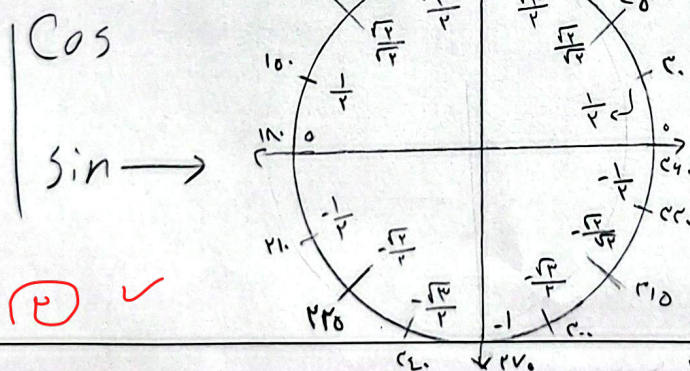
(2) ✓

ج) $m - 2 \geq 0 \Rightarrow m \geq 2, \quad m - 2 \neq 0 \quad m \neq 2 \quad D_f = [2, 2) \cup (2, +\infty)$

د) $|m| + m^2 \neq 0$
 هذه دالة من الدرجة 2
 $m = 0 \rightarrow D_f = (-\infty, 0) \cup (0, +\infty)$



(2) ✓



(2) ✓

$\cos \frac{11\pi}{4} = \frac{\sqrt{3}}{2} \rightarrow$ قوسية $-\frac{\sqrt{3}}{2}$

$\sin \frac{11\pi}{4} = \frac{1}{2}, \frac{1}{2}$

$\frac{11\pi}{4} = 3\pi - \frac{\pi}{4} \rightarrow -\cos \frac{\pi}{4} = -\frac{\sqrt{2}}{2}$
 $\frac{11\pi}{4} = 2\pi + \frac{3\pi}{4} \rightarrow \sin \frac{3\pi}{4} = \frac{\sqrt{2}}{2}$

(1)

$\Rightarrow -\frac{\sqrt{2}}{2} + \frac{\sqrt{2}}{2} = 0 \Rightarrow \sin \frac{11\pi}{4}$

$-\cos \frac{11\pi}{4} = \sin \left(\frac{\pi}{4} - \frac{11\pi}{4} \right) = \sin \left(-\frac{10\pi}{4} \right)$