

الف) $y^3 = 2m^2 + m$
 $y = \sqrt[3]{2m^2 + m}$

تابع هست

ب) $|y| = m + 3 - m^2$

$m = 0$

$|y| = 0 + 3 - 0$

$y = \pm 3$

تابع نیست

ج)

$\sqrt{m-4} = 0 \quad m = 4$

$|y-2| = 0 \quad y = 2$

نقطه $(4, 2)$

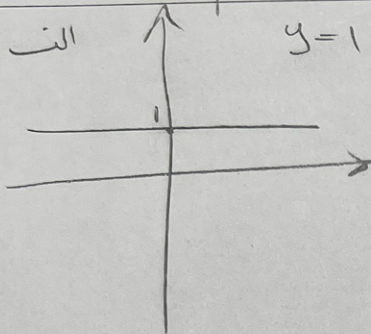
تابع هست

د) $\cos y = m$

$m = 0$

$y = \frac{\pi}{2}, \frac{3\pi}{2}, \dots$

تابع نیست

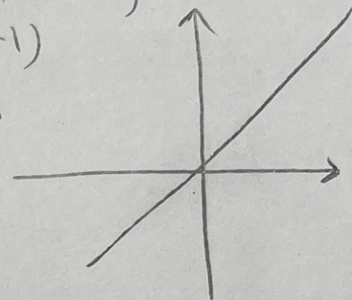


ب) $y - y_1 = a(m - m_1)$

$y - 2 = 2(m - 1)$

$y - 2 = 2m - 2$

$y = 2m$



الف) $f(m) = m$

$am + b = m$

$a = 1 \quad b = 0$

$a + 2b = 1 + 2(0) = 1$

ب) $\frac{-a}{p} = 2 \quad a = -4$

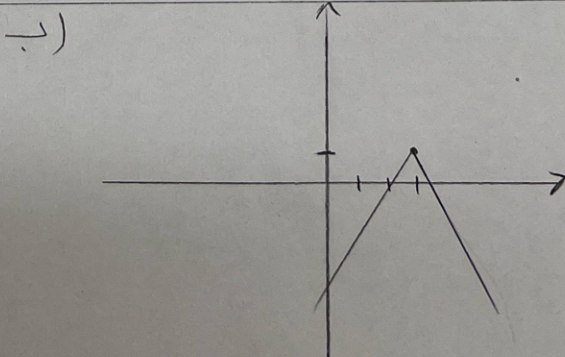
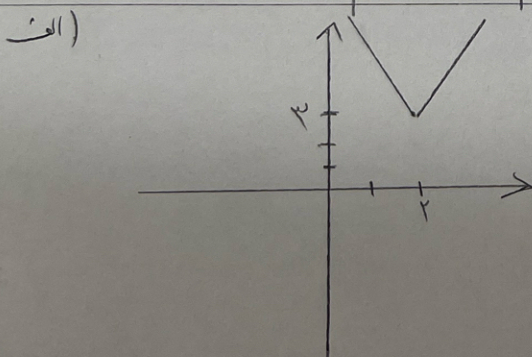
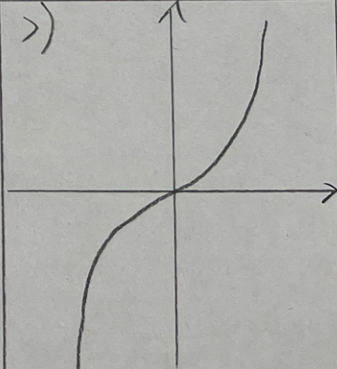
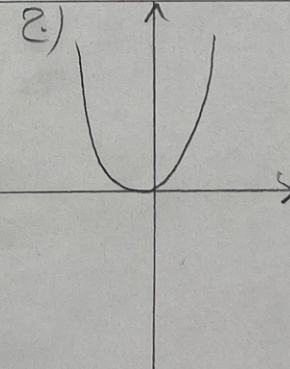
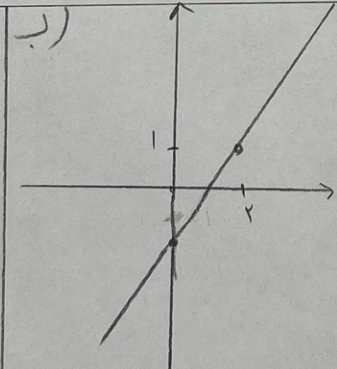
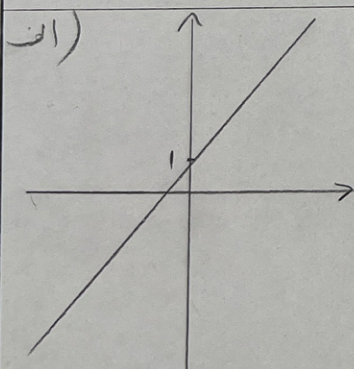
$مس = (2, 1)$

$1 = 2^2 + (-4)(2) + b$

$1 = 4 - 8 + b$

$b = 5$

$a + 2b = -4 + 2(5) = 6$



الف) $\frac{n+4}{n(n-4)}$ $n(n-4) > 0$ $n \neq 0 \quad n \neq 4$ $D_f = \mathbb{R} - \{0, 4\}$	ب) $\frac{n+4}{n^2-n+4}$ $\Delta = b^2 - 4ac$ $4^2 - 4 \times 1 \times 4$ $\Delta < 0$ $D_f = \mathbb{R}$	ج) $\Delta = b^2 - 4ac$ $1 - 4 \times 4 \Rightarrow \Delta < 0$ $D_f = \mathbb{R}$	د) $\frac{n+4}{n^2(n^2-4)}$ $n^2 \neq 0$ $n^2 \neq 2$ $n^2 \neq -2$ $D_f = \mathbb{R} - \{0, \pm 2\}$	6
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الف) $4-n > 0$ $4 > n$ $n < 4 \quad (-\infty, 4]$ $n-2 > 0$ $n > 2 \quad [2, +\infty)$ $[2, 4] = D_f$ $(-\infty, 4] \cap [2, +\infty)$	ب) $n^2+1 > 0$ $n^2 > -1$ $D_f = \mathbb{R}$ $(-\infty, +\infty)$	ج) $n-4 > 0$ $n > 4$ $(4, +\infty)$ $n-2 > 0$ $n > 2$ $[2, +\infty) \rightarrow$ $n \neq 4$	د) $ n + n^2 > 0$ $ n > 0 \quad n \neq 0$ $n^2 > 0 \quad n \neq 0$ $D_f = \mathbb{R} - \{0\}$	7
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