

۲۵
آزاد

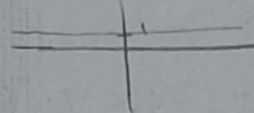
نام و نام خانوادگی: پاسبانمه تشریحی تکلیف شماره ۲۰۰ ... کلاس: چهارم و پنجم A ... ۱۴۰۰

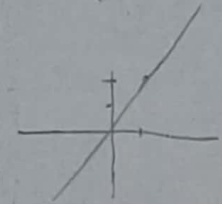
الف) $\left. \begin{matrix} y_1 - x_1 = 2x_1 \\ y_2 - x_2 = 2x_2 \end{matrix} \right\} \Rightarrow x_1 = x_2 \Rightarrow y_1 = y_2 \Rightarrow y_1 = y_2$ تابع ✓

ب) $x=0 \rightarrow |y|=2 \Rightarrow y=\pm 2$ تابع x

۲) $x-2=0 \Rightarrow x=2 \Rightarrow y-2=0 \Rightarrow y=2$ تابع ✓

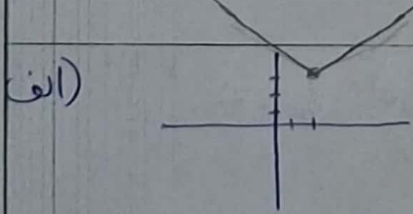
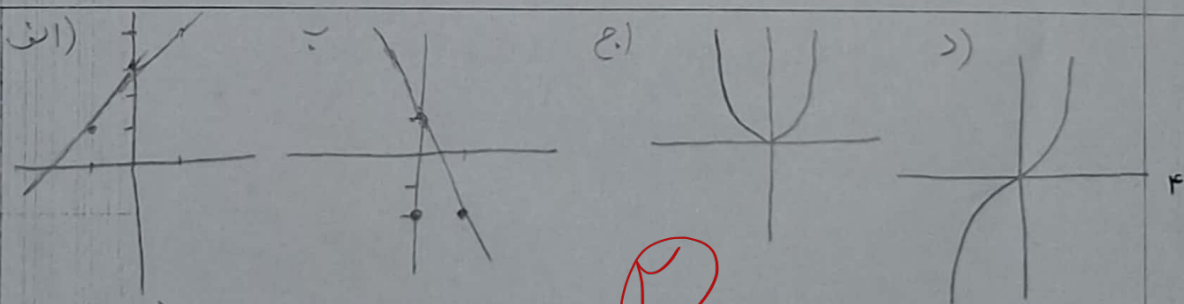
۳) $x=0 \rightarrow \cos y=0 \Rightarrow y=\frac{\pi}{2}, \frac{3\pi}{2}$ تابع x

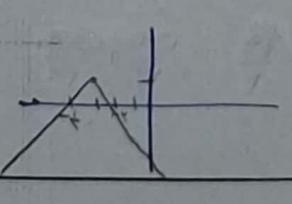
الف)  $f(x)=1$

ب)  $f(x)=2x$

الف) $y=x \Rightarrow x=ax+b \Rightarrow a=1 \Rightarrow b=0 \Rightarrow 1+0=1$

ب) $x = \frac{-a}{2} = -2 \Rightarrow -a = -4 \Rightarrow a = 4$
 $1 = 4 - 1 + b \Rightarrow b = 0$
 $-4 + 1 = -3$



ب)  $|x+2|=1$
 $x = -2$
 $x = -4$

الف) $x^2 - 4x + 4 = 0$ $x(x-4) = 0$ $x \neq 0$ $x \neq 4$ $D = \mathbb{R} - \{0, 4\}$

ب) $x^2 - 7x + 12 = 0$ $\Delta = 49 - 48 = 1$ $\rightarrow$ مستقيم $D = \mathbb{R}$

ج) $x^2 + x + 1 = 0$ $\Delta = 1 - 4 = -3$ $\rightarrow$ مستقيم $D = \mathbb{R}$

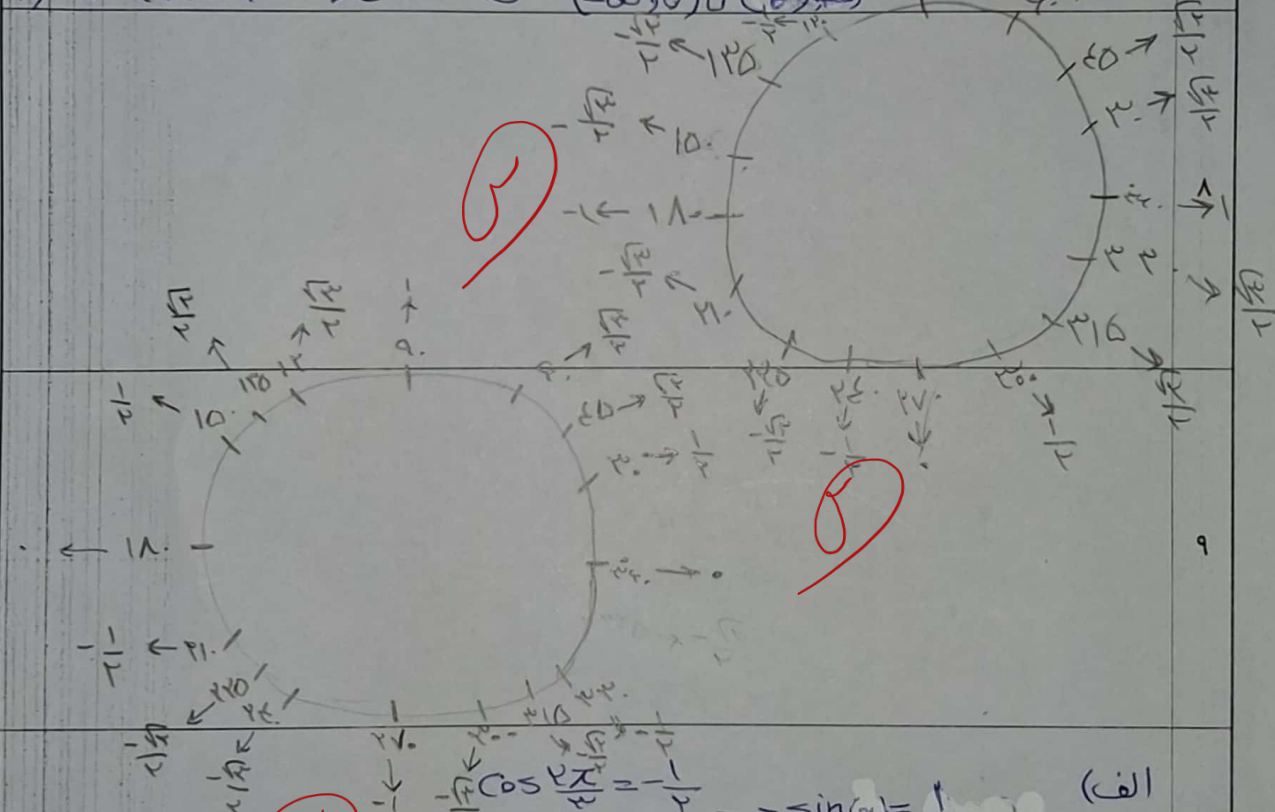
د) $x^2 - 4x^2 \neq 0$ $x^2(x^2 - 4) = 0$ $x \neq 0$ $x \neq \pm 2$ $D = \mathbb{R} - \{0, -2, 2\}$

هـ) $\sqrt{4-x} + \sqrt{x-2} = 0$ $4-x \geq 0 \Rightarrow x \leq 4$ $x-2 \geq 0 \Rightarrow x \geq 2$ $D = [2, 4]$

و) $x^2 \geq 0 \Rightarrow x^2 + 1 > 0$ $D = \mathbb{R}$

ز) $x-2 \geq 0 \Rightarrow x \geq 2$ $x-4 \neq 0$ $x \neq 4$ $D = [2, 4) \cup (4, +\infty)$

ح) $|x| + x^2 \neq 0$ $x \neq 0$ $D = (-\infty, 0) \cup (0, +\infty)$



الف) $\cos \frac{\pi}{2} = -\frac{1}{2}$ $\rightarrow \sin(x) = \frac{1}{2}$ $\Rightarrow x = \frac{\pi}{6}, x = \frac{5\pi}{6}$

ب) $\cos \frac{11\pi}{6} = \frac{\sqrt{3}}{2}$ $\rightarrow \sin(x) = -\frac{\sqrt{3}}{2}$ $\Rightarrow x = \frac{4\pi}{3}, x = \frac{5\pi}{3}$