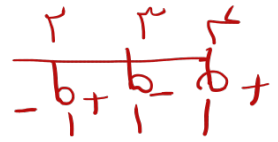
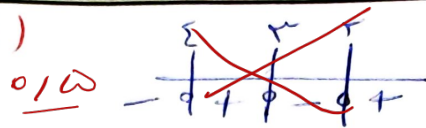
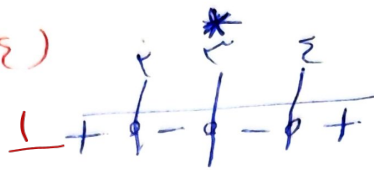


الف) $y^2 - x = 2x^2$ $y_1^2 = x + 2x^2$ $y_2^2 = x + 2x^2$ $y_1^2 = y_2^2$ تابع زوج ب) $y + x^2 = x + 2$ $y \leq 2 \rightarrow y = \pm 2$ تابع زوج ج) $\sqrt{x-2} + y-2 = 0$ $x \geq 2 \rightarrow y-2 = 0 \rightarrow y = 2$ تابع زوج د) $x = \cos y$ $y = \arccos x$ $x \in [-1, 1]$ $y \in [0, \pi]$ تابع زوج	۱
الف) $y = \frac{x+2}{x^2-2x+1}$ $x^2-2x+1 \neq 0$ $x(x-2) \neq 1$ $x \neq 0, 1, 2$ $D_f = \mathbb{R} - \{0, 1, 2\}$ ب) $y = \frac{x+2}{x^2-2x+1}$ $\Delta = b^2 - 4ac = (-2)^2 - 4(1)(1) = 0$ $\Delta \leq 0 \rightarrow x = 1$ $x \neq 1$ $D_f = \mathbb{R} - \{1\}$ ج) $y = \frac{x+2}{x^2-2x+1}$ $\Delta = 1^2 - 2x \leq 0 \rightarrow x \geq \frac{1}{2}$ $x \neq 1$ $D_f = \mathbb{R} - \{1\}$ د) $y = \frac{x+2}{x^2-2x+1}$ $x^2-2x+1 \neq 0 \rightarrow x(x-2) \neq 1$ $x \neq 0, 1, 2$ $D_f = \mathbb{R} - \{0, 1, 2\}$	۲
الف) $y = \sqrt{x-2} + \sqrt{x-2}$ $x-2 \geq 0 \rightarrow x \geq 2$ $D_f = [2, +\infty)$ ب) $y = \frac{x+1}{x^2+1}$ $x^2+1 \neq 0$ $x^2 \neq -1$ $D_f = \mathbb{R}$ ج) $y = \frac{\sqrt{x-2}}{x-2}$ $x-2 \geq 0 \rightarrow x \geq 2$ $x-2 \neq 0 \rightarrow x \neq 2$ $D_f = [2, +\infty) \cup (2, +\infty)$ د) $y = \frac{2x+3}{ x +x^2}$ $x +x^2 \neq 0 \rightarrow x \neq 0$ $D_f = \mathbb{R} - \{0\}$	۳
الف) $y = \ln x+2$ ب) $y = 2/ x$ ج) $y = x+2$ د) $y = x+2 + 2$	۴
الف) $f(x) + 2$ ب) $2f(x)$ ج) $f(x-1)$ د) $-f(x)$	۵

الف) $y = (n-2)(n-3)(n-4)$

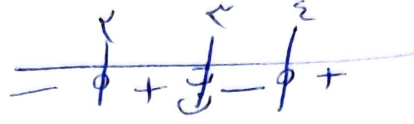


ب) $y = (n-2)(n-3)^2(n-4)$



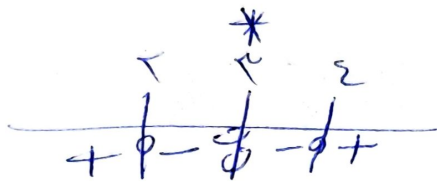
(1, ∞)

الف) $y = \frac{(n-2)(n-3)}{n-4}$



(1, ∞)

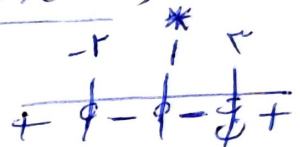
ب) $y = \frac{(n-2)(n-4)}{(n-3)^2}$



Y

الف) $y = \frac{n^2 - 2n + 2}{n-2}$

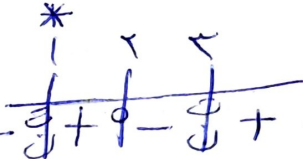
$= \frac{(n-1)(n^2 + n - 2)}{n-2} = \frac{(n-1)(n-1)(n+2)}{n-2}$



(1, ∞)

ب) $y = \frac{n^2 - 2n + 2}{n^2 - 2n + 2}$

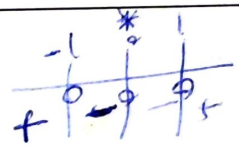
$= \frac{(n-1)(n-2)}{(n-1)(n-2)} = 1$



Λ

الف) $y = \frac{n^2 - n^2}{n^2 + n + 2}$

$= \frac{n^2(n^2 - 1)}{n^2 + n + 2} = \frac{n^2(n-1)(n+1)}{n^2 + n + 2}$



(1, ∞)

$\Delta = b^2 - 4ac = 1^2 - 4 \times 1 \times 2 = -7 < 0$

مخرج غير منفرج

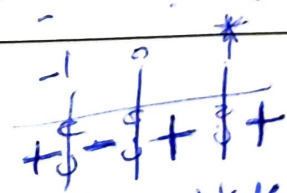
ب) $y = \frac{n^2 + 2n + 2}{n^2 + 2n + 2}$

$\Delta = 9 - 4 \times 2 \times 2 = -7 < 0$

مخرج غير منفرج

الف) $y = \sqrt{\frac{n^2 - 1}{n^2 - n}}$

$n^2 - n \neq 0$
 $n \neq 0, n \neq 1$

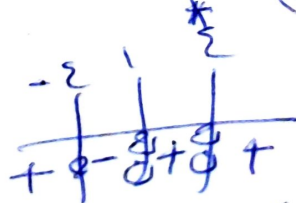


$(-\infty, -1) \cup (0, 1) \cup (2, \infty)$

(1, ∞)

ب) $y = \sqrt{\frac{n^2 - 14}{n^2 - 2n + 2}}$

$= \frac{(n-2)(n+2)}{(n-1)(n-2)}$



$(-\infty, -2] \cup (1, 2) \cup (2, \infty)$