

۱۳، ۷۵

Subject:

* ناله خفا *

ساینا المعیری

الف) مثال برای اثبات نابریونی نهایی! $x=1 \rightarrow y^2-1=2 \rightarrow y^2=3 \rightarrow y=\sqrt{3}$ ✓
 ب) $x=1 \rightarrow |y+1|=1+1=2 \rightarrow |y|=3, y=\pm 3$ X
 (۱)

ج) $\emptyset$ $x=2, y=2$ نهایی! تک نقطه
 د) $x=\cos y, x=0 \rightarrow \cos y=0 \rightarrow X$
 $y=\frac{\pi}{2}, \frac{3\pi}{2}, \dots$

الف) $x^2-x \neq 0 \rightarrow D_f = \mathbb{R} - \{0, 1\}$ ✓

ب) $\frac{x+1}{x^2-x+1}$ $\rightarrow D_f = \mathbb{R}$ ✓
 $\Delta < 0$

ج) $\frac{x+1}{x^2-x+1} \rightarrow x^2-x \neq 0 \rightarrow D_f = \mathbb{R} - \{0, 1\}$ ✓
 $x^2(x^2-1) < 0$
 $x < 0$
 $x < -1$

د) $\frac{x+1}{x^2-x+1} \rightarrow x^2+x+1 \neq 0 \rightarrow x^2+x+1 > 0 \rightarrow D_f = \mathbb{R}$

الف) $4-x > 0 \rightarrow x < 4, x > x < 4$ $\rightarrow x < 4$ ✓
 $x-1 > 0 \rightarrow x > 1$
 $1 < x < 4$

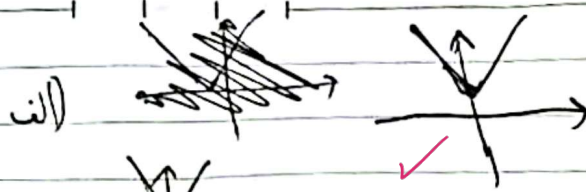
ب) $x^2+1 \neq 0 \rightarrow x^2 \neq -1 \rightarrow D_f = \mathbb{R}$

ج) $x-1 \neq 0 \rightarrow x \neq 1, x-1 > 0 \rightarrow x > 1 \rightarrow [2, +\infty) - \{1\}$ ✓

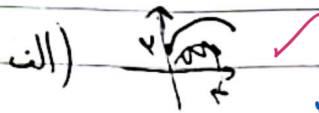
د) ~~...~~ $(0, +\infty) \cap D_f = \mathbb{R} - \{1\}$

IDEA

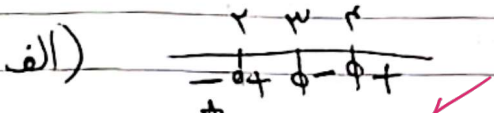
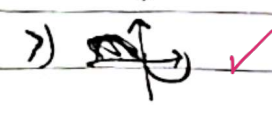
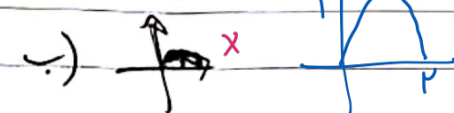
Subject:



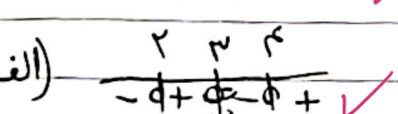
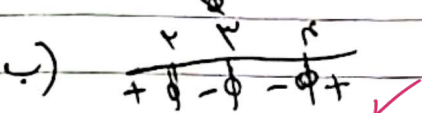
(2)



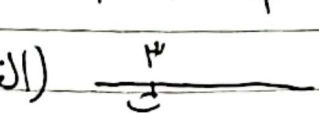
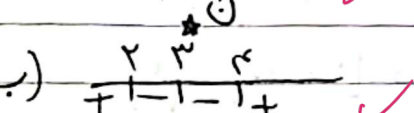
(1, 2)



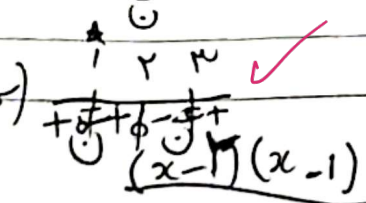
(2)



(2)



مربوب بنویس!



IDEA

الف)
$$\frac{(x-1)^2(x+2)}{x^2-3x+2}$$

$$\begin{array}{r} x^2 - 3x + 2 \\ -2 \quad 1 \quad 3 \\ \hline + \quad 0 \quad -6 \quad -5 \end{array}$$

$$\begin{array}{r} 1 \quad 2 \quad 3 \\ + \quad 1 \quad -1 \quad + \end{array}$$

ج)
$$\frac{(x-2)(x-1)}{(x-3)(x-1)}$$

الف) ~~$x^2 - x^2 \rightarrow x^2(x^2 - 1)$~~

$$\frac{-1 \quad 0 \quad 1}{+1 \quad -2 \quad -1 \quad +}$$

①

ب) ~~$x^2 - x^2 \rightarrow x^2(x^2 - 1)$~~

②

الف) $D_f = R - \{0, 1\}$

ب) ~~$x^2 - x^2 \rightarrow x^2(x^2 - 1)$~~

$$\frac{-1 \quad 0 \quad 1}{+1 \quad -2 \quad -1 \quad +}$$

$D_f = (-\infty, -1] \cup (1, +\infty) - \{1\}$

الف) $= \sqrt{\frac{(x-1)(x^2+x+1)}{x(x-1)(x+1)}}$

$$\frac{-1 \quad 0 \quad 1}{+1 \quad -2 \quad -1 \quad +}$$

$D_f = (-\infty, -1) \cup (0, +\infty) - \{1\}$

ب) $\Delta < 0$

$$\frac{x^2 + 4x + 2}{x^2 + 4x + 4}$$