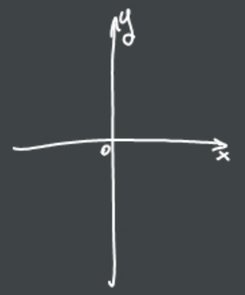
$$f : x \in A \longrightarrow y \in B$$

CLASSIFICAZIONE

ALGEBRICHE

RAZ

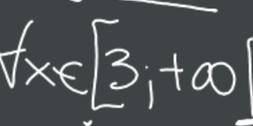
- INT: $y = x^3 - 3x + 1$, $D: \forall x \in \mathbb{R}$



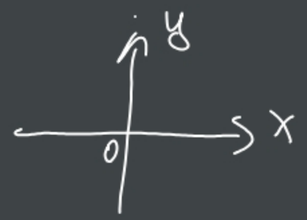
- FR: $y = \frac{x-1}{x-2}$, den $\neq 0$, $x \neq 2$, $\forall x \in \mathbb{R} - \{2\}$

IRR

- INT: indipari: $y = \sqrt{x-3}$, $x - 3 \geq 0$, $x \geq 3$, $\forall x \in [3; +\infty[$



- FR: und. dispari: $y = \sqrt[3]{x+2}$, $D: \forall x \in \mathbb{R}$



TRASCENDENTI

ESPONENZIALI

- INT: $y = 2^{x-3}$, $\forall x \in \mathbb{R}$

- FRATTE
  - ① $y = \frac{2^{x-3}}{x-2}$, $x \neq 2$
  - ② $y = 2^{\frac{x-3}{x-2}}$, $x \neq 2$

IRR

FRATTE

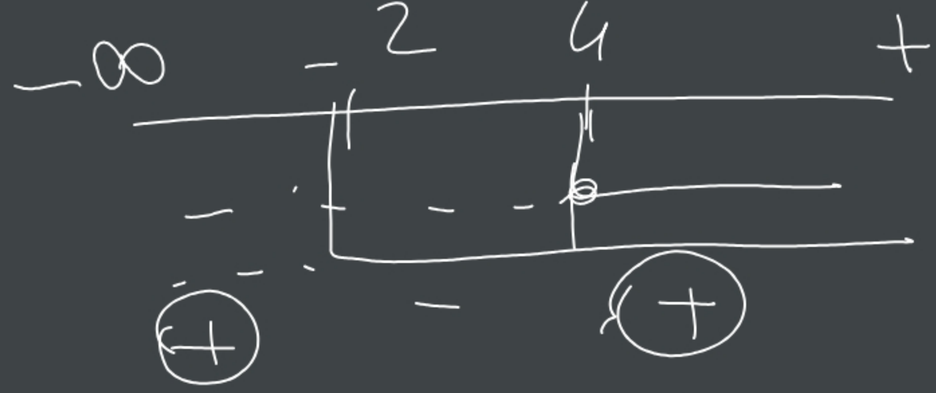
n pari

$$y = \sqrt{\frac{x-4}{x-2}}$$

$$\begin{cases} \frac{x-4}{x-2} \geq 0 \\ x-2 \neq 0 \end{cases}$$

$$\begin{cases} x-4 \geq 0 \\ x+2 > 0 \end{cases}$$

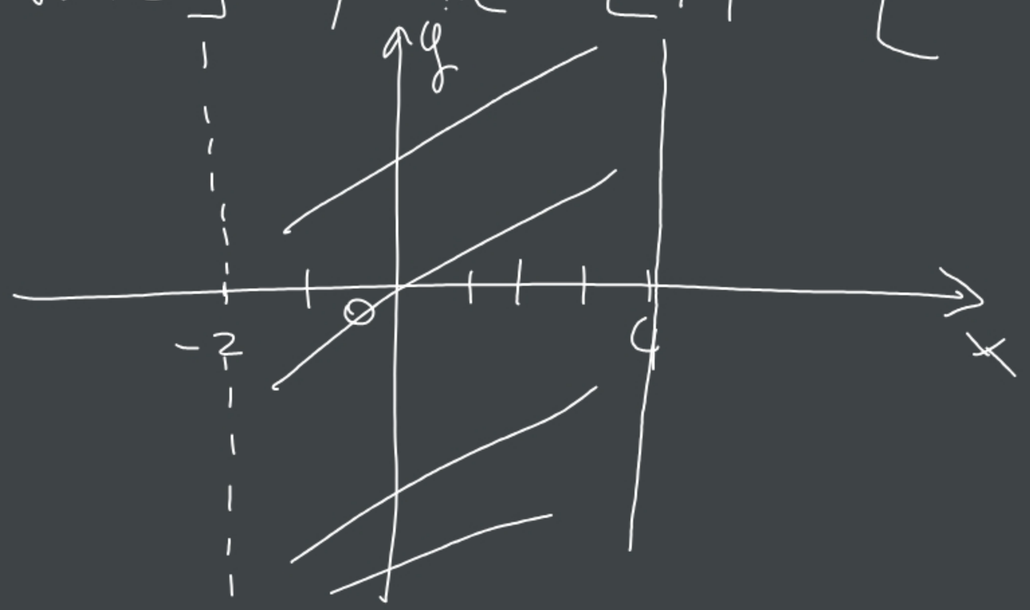
$$\begin{cases} x \geq 4 \\ x > -2 \end{cases}$$



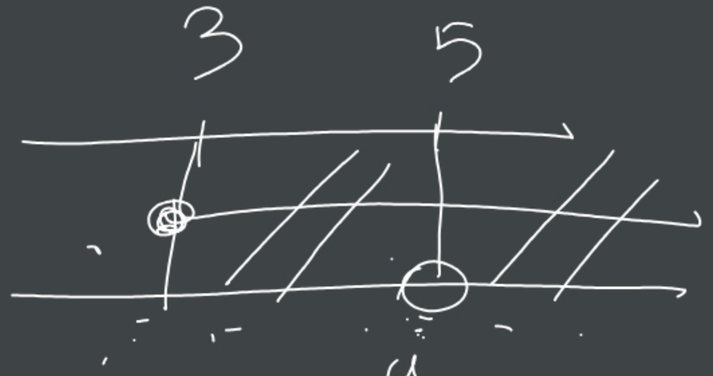
[ ] chiuse

] [aperte

$\forall x \in]-\infty; -2[\cup [4; +\infty[$



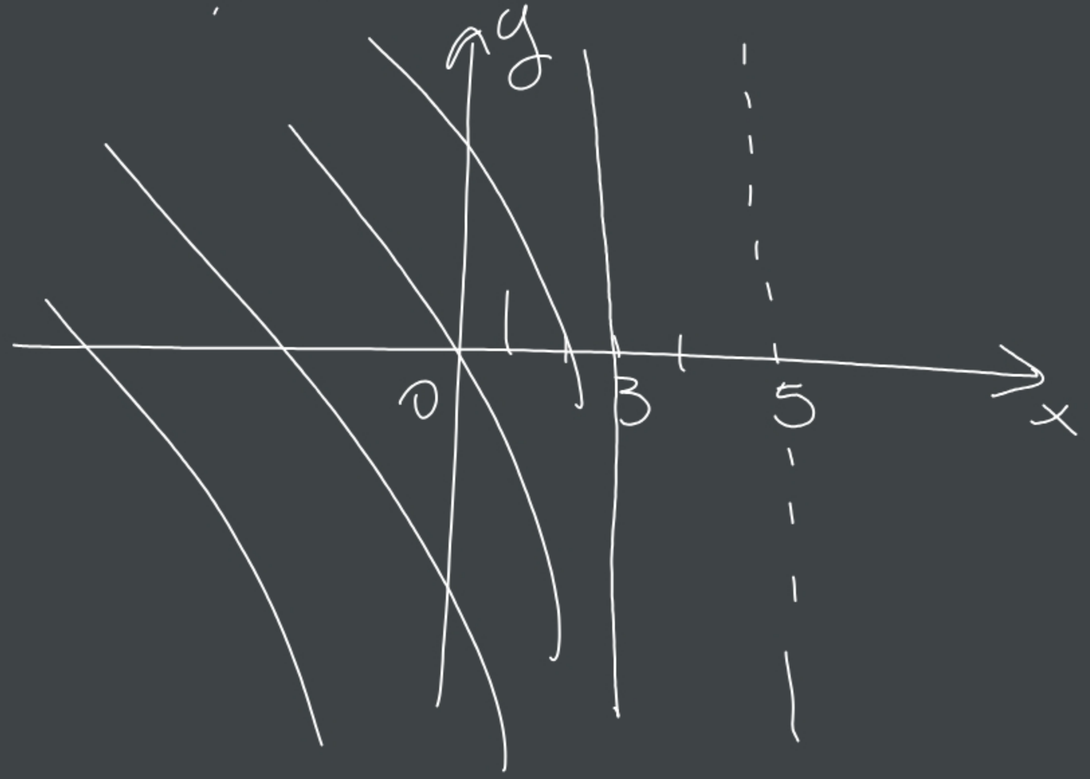
$$y = \frac{\sqrt{x-3}}{x-5}$$

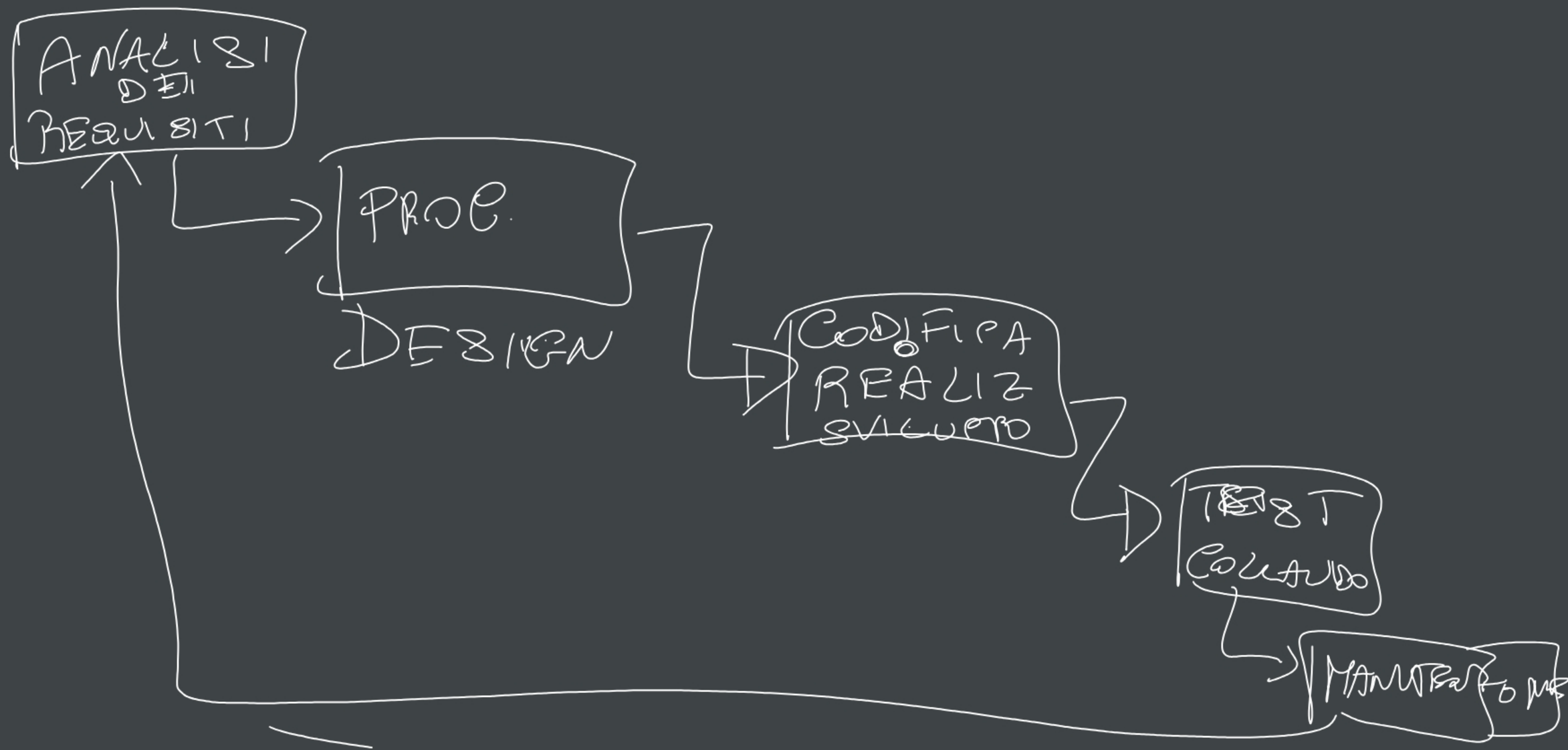


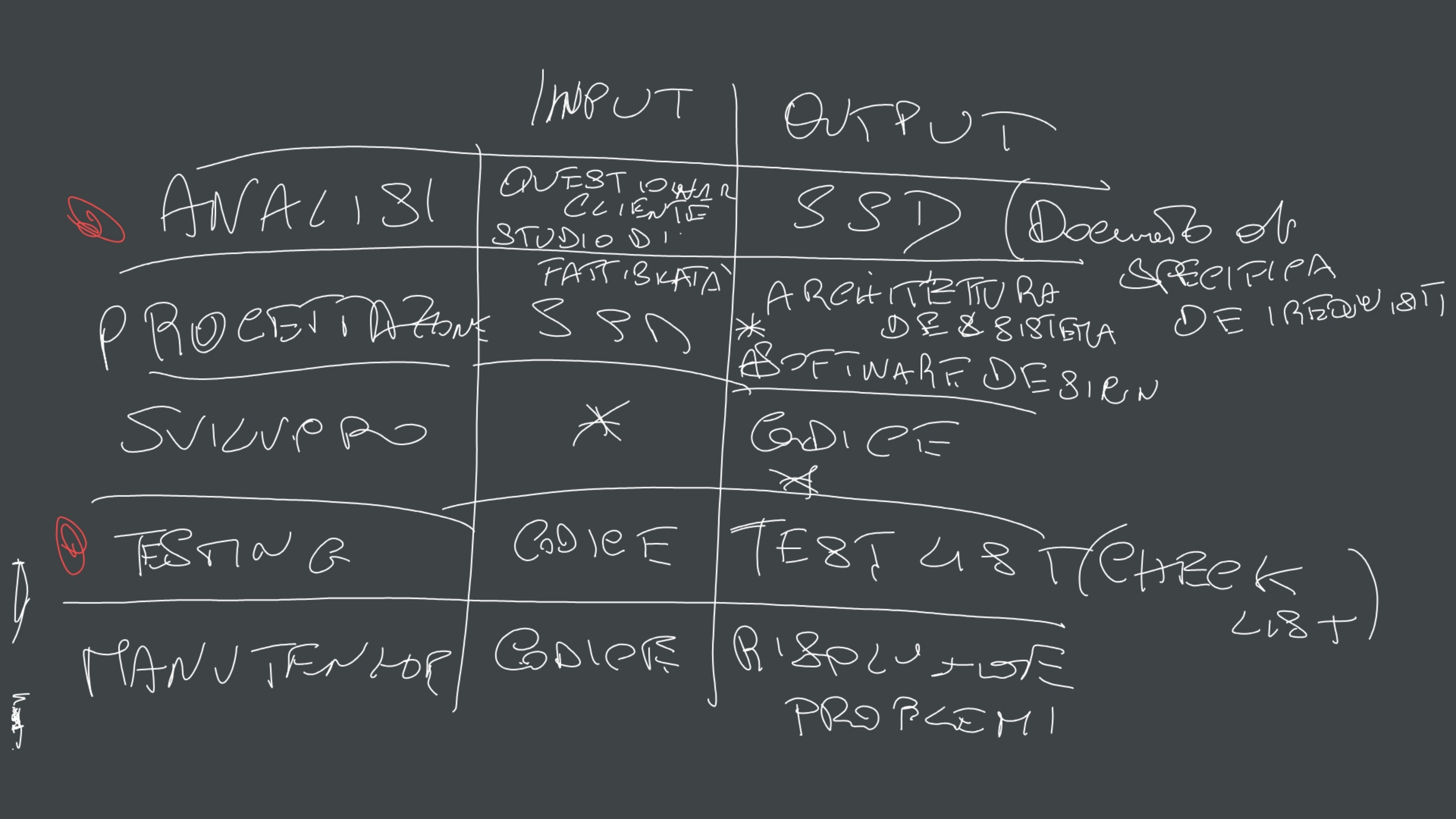
$\rightarrow D : \forall x \in [3;5[\cup]5;+\infty[$

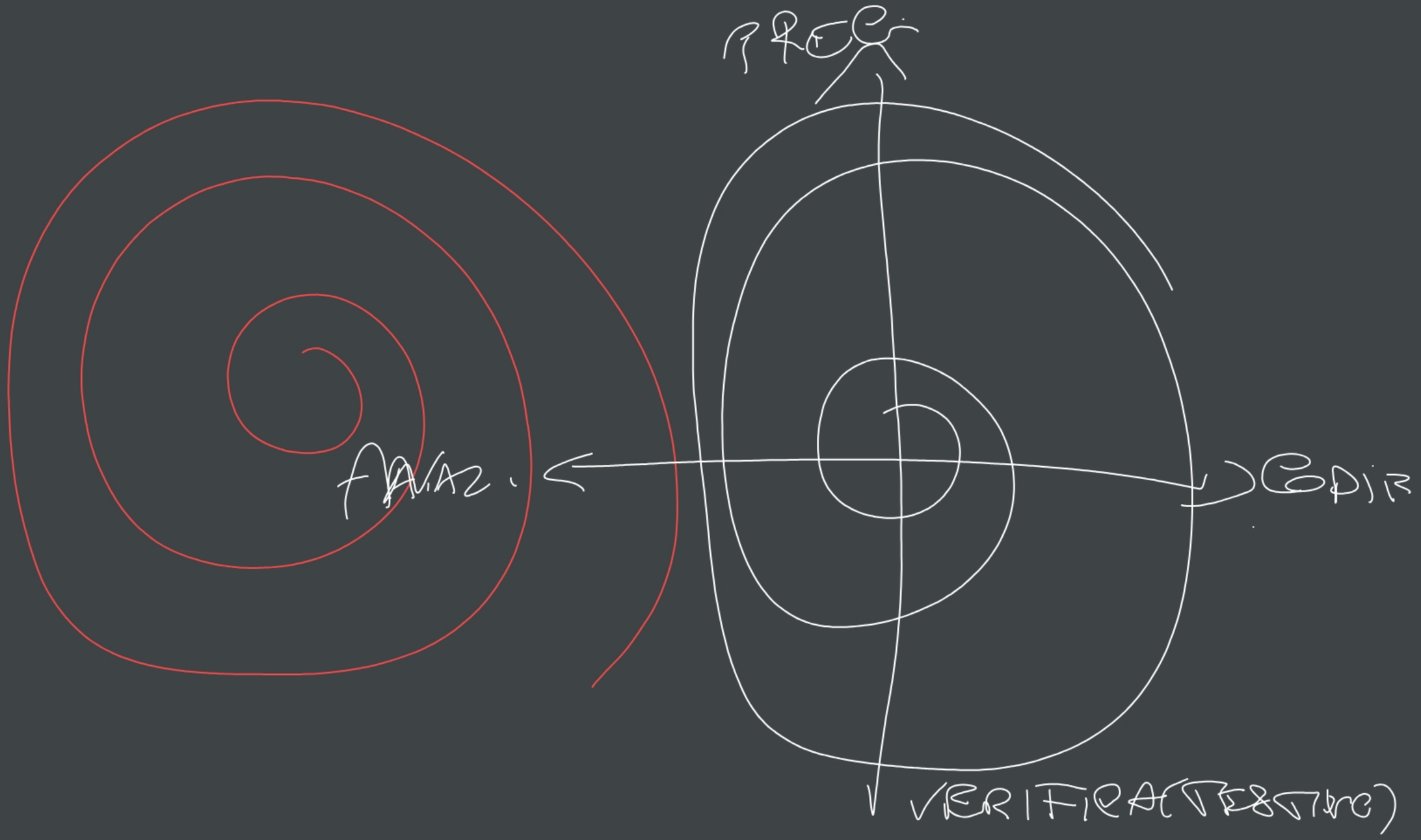
$$\begin{cases} x-3 \geq 0 \\ x-5 \neq 0 \end{cases}$$

$$\begin{cases} x \geq 3 \\ x \neq 5 \end{cases}$$




ANALISI DEI REQUISITI
PROG.
DESIGN
CODIFICA REALIZ SVILUPPO
TEST COLLAUDO
MANUTENZIONE

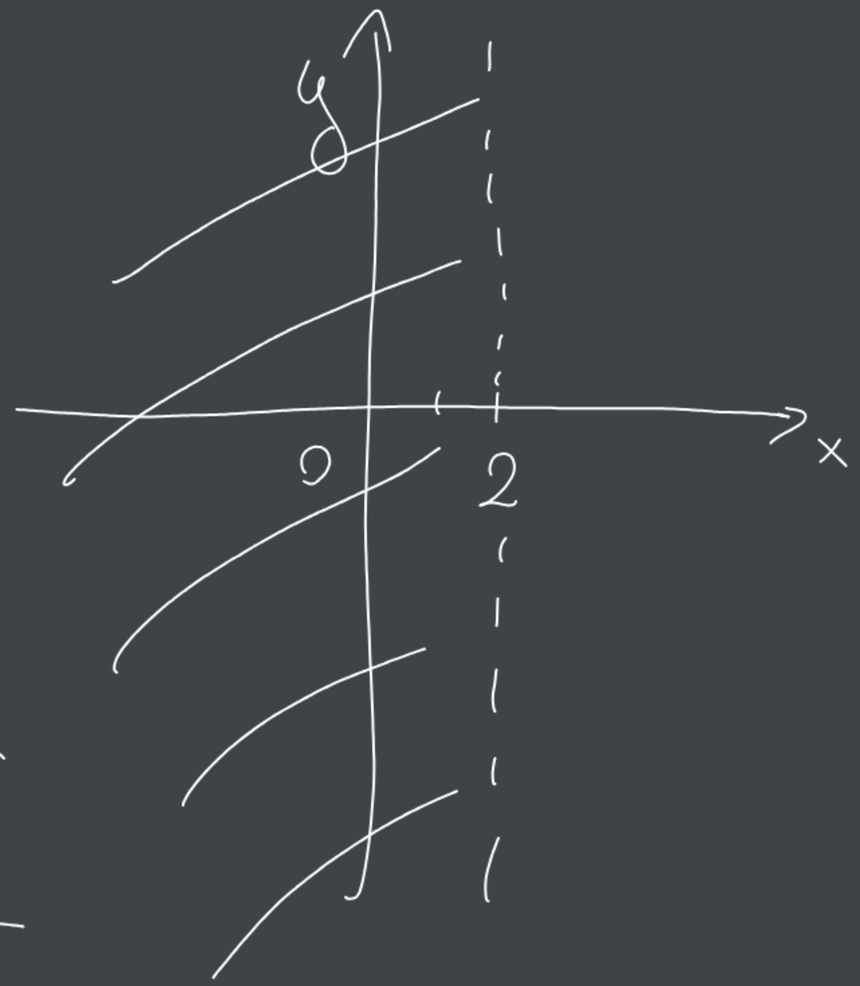

INPUT
OUTPUT
ANALISI
QUESTIONARI CLIENTE
STUDIO DI FATTIBILITÀ
SSD
(Documento di specifica dei requisiti)
PROGETTAZIONE
SSD
ARCHITETTURA DI SISTEMA
SOFTWARE DESIGN
SVILUPPO
CODICE
TESTING
CODICE
TEST UNIT (CHECK LIST)
MANUTENZIONE
CODICE
RISOLUZIONE PROBLEMI


PREG
AVIAZ.
DEDIR
VERIFICA(TESTING)

$$y = \frac{x-3}{\sqrt{x-2}}$$

$$\begin{cases} x-2 \geq 0 \\ x-2 \neq 0 \end{cases} \rightarrow x-2 > 0$$

$x > 2 \quad \forall x \in]2; +\infty[$

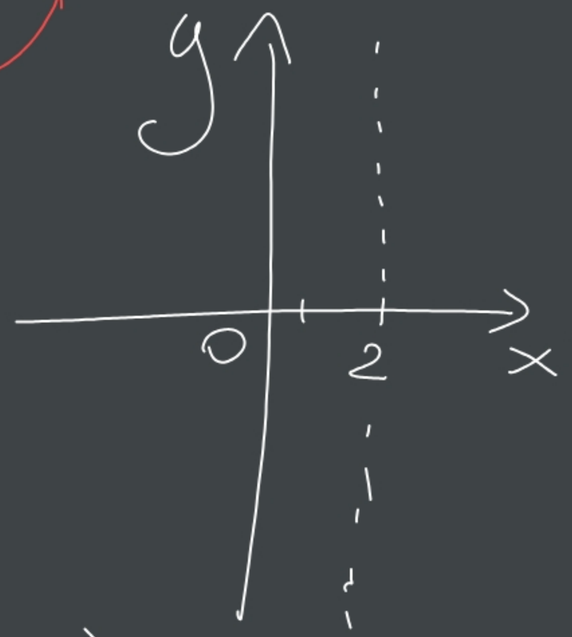


$$y = \sqrt[3]{\frac{x-3}{x-2}}$$

$$x - 2 \neq 0$$

$$x \neq 2$$

$$\forall x \in \mathbb{R} - \{2\}$$



$$y = \frac{\sqrt[3]{x-3}}{x-2}$$

$$x \neq 2$$

$$y = \frac{x-3}{\sqrt[3]{x-2}}$$

$$\sqrt[3]{x-2} \neq 0 \qquad x \neq 2$$

LOGARITMICHE

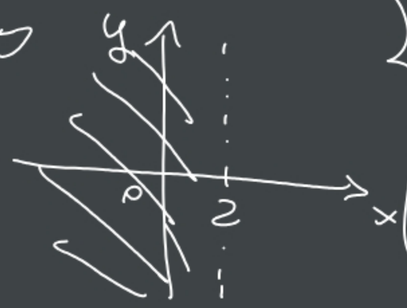
INT

$y = \log(x-2)$

argom > 0

$x - 2 > 0$

$x > 2$

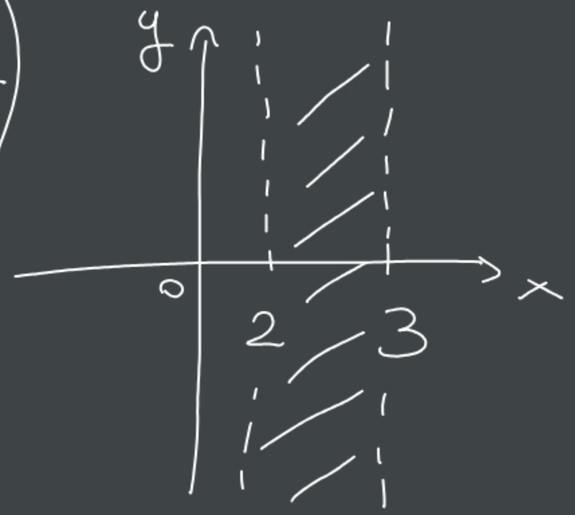


$\forall x \in]2; +\infty[$

FRATE

$y = \log\left(\frac{x-2}{x-3}\right)$

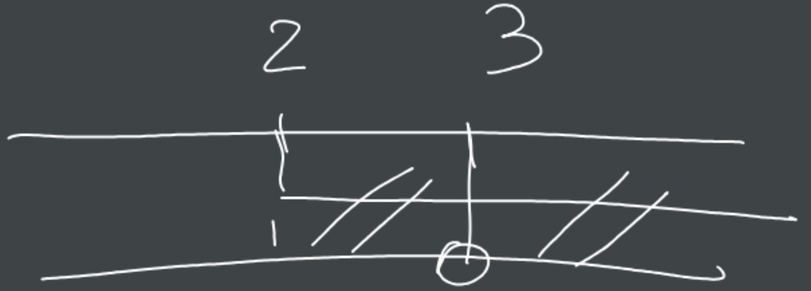
$$\begin{cases} \frac{x-2}{x-3} > 0 \\ x - 3 \neq 0 \end{cases}$$

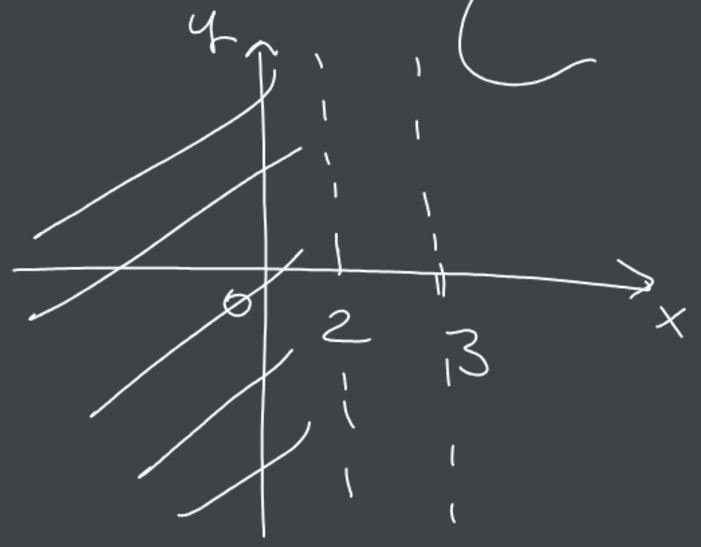


$\forall x \in]-\infty; 2[\cup]3; +\infty[$

$$y = \frac{\log(x-2)}{x-3}$$

$$\begin{cases} x-2>0 \\ x-3\neq 0 \end{cases} \Leftrightarrow \begin{cases} x>2 \\ x\neq 3 \end{cases}$$



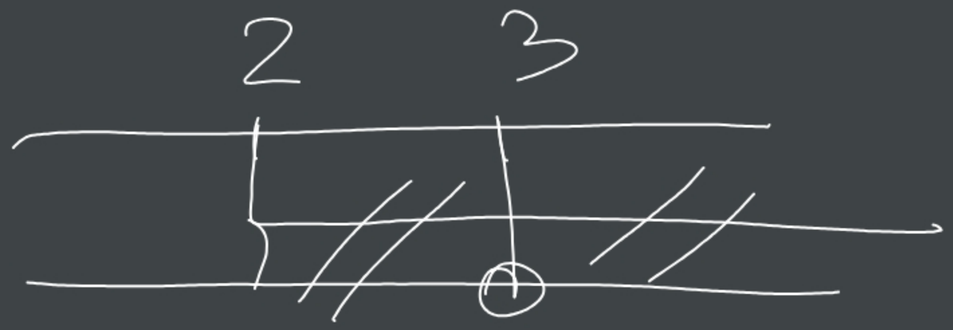


$$\forall x \in]2;3[\cup]3;+\infty[$$

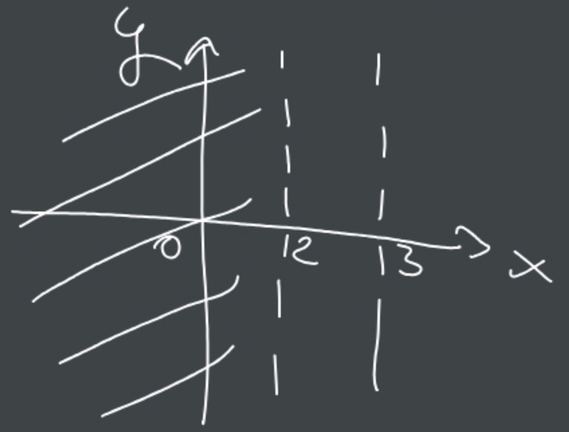
$$y = \frac{x-3}{\log(x-2)}$$

$$\begin{cases} x-2>0 & x>2 \\ \log(x-2) \neq 0 = \log 1 \end{cases}$$

$$x-2 \neq 1 \qquad x \neq 3$$



$$\forall x \in]2;3[\cup]3;+\infty[$$



GONIOMETRICHE

$y = \cos x$

$y = \sin x$

$y = \tan x$

$y = \cot x$

$y = \cos(x-3)$

Dominio + grafico

1) $y = \frac{\sqrt{x^2 - 9}}{x - 5}$

2) $y = \frac{x^2 - 3x}{x^2 + 1}$

3) $y = \frac{x^2 - 5x}{\sqrt{x - 4}}$

4) $y = \sqrt[3]{\frac{x - 2}{x^2 - 1}}$

5) $y = \frac{x^2 - 1}{x^2 - 3x + 2}$

6) $y = 2^{\frac{x-5}{x-3}}$

7) $y = \log\left(\frac{x - 2}{x - 5}\right)$

8) $y = \sqrt{\frac{x - 3}{x^2 - 3x - 4}}$