João Pedro Carvalho Ferreira   2024.1.08.030

Atividade 1.

a) $[-1, 3] = \{x \in \mathbb{R} \mid -1 \leq x \leq 3\}$
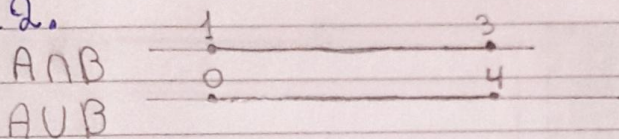
b) $[0, 2[= \{x \in \mathbb{R} \mid 0 \leq x < 2\}$

c) $]-3, 4[= \{x \in \mathbb{R} \mid -3 < x < 4\}$
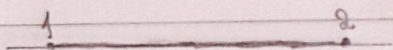
d) $]-\infty, 5[= \{x \in \mathbb{R} \mid x < 5\}$

e) $[1, +\infty[= \{x \in \mathbb{R} \mid x \geq 1\}$
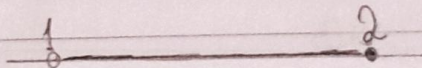
Atividade 2.

$A \cap B$
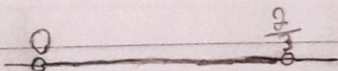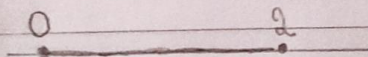
$A \cup B$

Atividade 3.

a) $[0, 2] \cap [1, 3]$

b) $[0, 2] \cap]1, 3[$

c) $]-1, \dfrac{2}{3}[\cap]0, \dfrac{4}{3}[$

d) $]-\infty, 2] \cap [0, +\infty[$

Atividade 4.

a) $[-1, 3] \cup [0, 4] = [-1, 4]$ c) $[-1, 3] \cup [3, 5] = [-1, 5]$

b) $]-2, 1] \cup]0, 5[=]-2, 5[$ d) $[-\dfrac{1}{2}, 0[\cup]-\dfrac{3}{2}, -\dfrac{1}{4}] =]-\dfrac{3}{2}, 0[$

tilibra

Atividade 5.

$C_A^B = A - B = [0,5[-]1,3[= [0,1] \cup [3,5[$