

# Math review

## Conjuntos

$$\mathbb{Q} = \left\{ \frac{a}{b} \mid a, b \in \mathbb{Z} \neq 0 \right\} \quad (1)$$

$$\mathbb{Z} = \{\dots, -3, -2, -1, 0, 1, 2, 3, \dots\} \quad (2)$$

$$\mathbb{N} = \{0, 1, 2, 3, \dots\} \quad (3)$$

## Soma e produto de racionais

$$\frac{a}{b} + \frac{c}{d} = \frac{ad + bc}{bd} \quad (4)$$

$$\frac{a}{b} \cdot \frac{c}{d} = \frac{ac}{bd} \quad (5)$$

## Sinal positivo e estritamente positivo

$$\frac{a}{b} \geq 0 \implies a \cdot b \in \mathbb{N} \quad (6)$$

$$a \cdot b \in \mathbb{N} \wedge a \neq 0 \implies \frac{a}{b} > 0 \quad (7)$$