

## Intervalos de números reais



## Intervalos Limitados

- Intervalo aberto de extremos – 2 e 1:

$$A = \{x \in \mathbb{R}: -2 < x < 1\}$$



$$A = ] - 2 ; 1 [$$

- Intervalo fechado à esquerda e aberto à direita de extremos – 2 e 1:

$$B = \{x \in \mathbb{R}: -2 \leq x < 1\}$$



$$B = [ - 2 ; 1 [$$

- Intervalo aberto à esquerda e fechado à direita de extremos –2 e 1:

$$C = \{x \in \mathbb{R}: -2 < x \leq 1\}$$



$$C = ] - 2 ; 1 ]$$

- Intervalo fechado de extremos – 2 e 1:

$$D = \{x \in \mathbb{R}: -2 \leq x \leq 1\}$$



$$D = [ - 2 ; 1 ]$$

1. Considera cada um dos conjuntos de números reais e representa-os na reta real e em forma de intervalo.

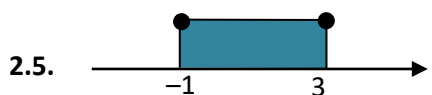
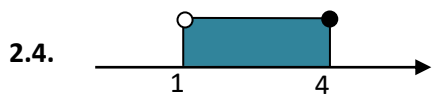
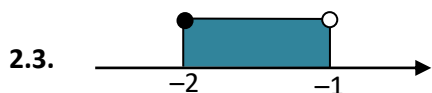
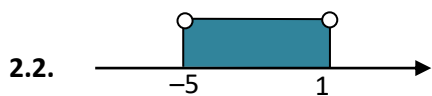
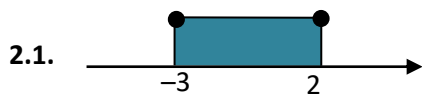
1.1.  $A = \{x \in \mathbb{R}: -3 \leq x < 1\}$

1.2.  $B = \{x \in \mathbb{R}: 1 < x \leq 2\}$

1.3.  $C = \{x \in \mathbb{R}: -4 \leq x \leq 5\}$

1.4.  $D = \{x \in \mathbb{R}: -1 < x < 5\}$

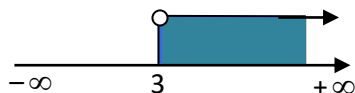
2. Considera cada uma das seguintes representações na reta real e indica o intervalo definido e a condição que o define.



## Intervalos Ilimitados

• Intervalo de 3 a  $+\infty$  aberto à esquerda:

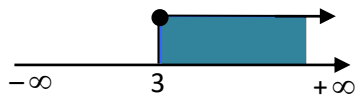
$$A = \{x \in \mathbb{R} : x > 3\}$$



$$A = ]3; +\infty [$$

• Intervalo de 3 a  $+\infty$  fechado à esquerda:

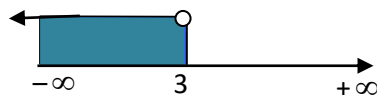
$$B = \{x \in \mathbb{R} : x \geq 3\}$$



$$B = [3; +\infty [$$

• Intervalo de  $-\infty$  a 3 aberto à direita:

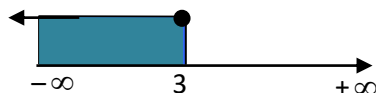
$$C = \{x \in \mathbb{R} : x < 3\}$$



$$C = ]-\infty; 3 [$$

• Intervalo de  $-\infty$  a 3 fechado à direita:

$$D = \{x \in \mathbb{R} : x \leq 3\}$$



$$D = ]-\infty; 3 ]$$

3. Considera cada um dos conjuntos de números reais e representa-os na reta real e em forma de intervalo.

3.1.  $A = \{x \in \mathbb{R}: x > 1\}$

3.2.  $B = \{x \in \mathbb{R}: x \leq -2\}$

3.3.  $C = \{x \in \mathbb{R}: x \geq 3\}$

3.4.  $D = \{x \in \mathbb{R}: x < 4\}$

3.5.  $E = \{x \in \mathbb{R}: x \geq -103\}$

4. Considera cada uma das seguintes representações na reta real e indica o intervalo definido e a condição que o define.

