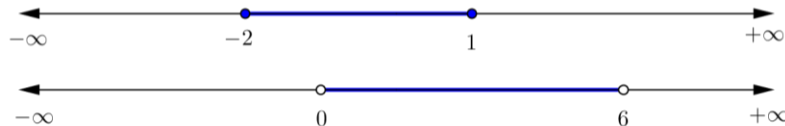


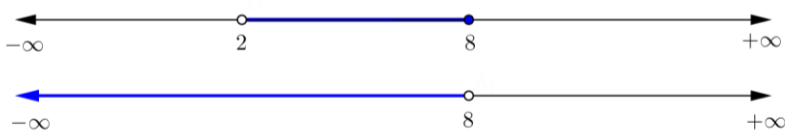
Ejercicio 13

a) $A = [-2, 1]$ y $B = (0, 6)$



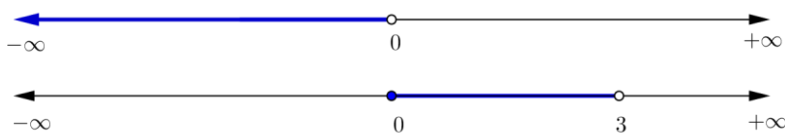
| | Intervalo | Forma algebraica | Representación recta real |
|------------|-----------|--|---------------------------|
| $A \cup B$ | $[-2, 6)$ | $\{x \in \mathbb{R} / -2 \leq x < 6\}$ | |
| $A \cap B$ | $(0, 1]$ | $\{x \in \mathbb{R} / 0 < x \leq 1\}$ | |

b) $A = (2, 8]$ y $B = \{x \in \mathbb{R} / 8 > x\}$



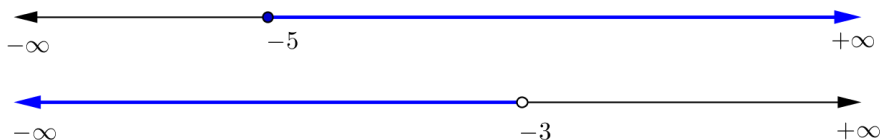
| | Intervalo | Forma algebraica | Representación recta real |
|------------|----------------|------------------------------------|---------------------------|
| $A \cup B$ | $(-\infty, 8]$ | $\{x \in \mathbb{R} / x \leq 8\}$ | |
| $A \cap B$ | $(2, 8)$ | $\{x \in \mathbb{R} / 2 < x < 8\}$ | |

c) $A = \{x \in \mathbb{R} / x < 0\} = (-\infty, 0)$ y $B = \{x \in \mathbb{R} / 0 \leq x < 3\} = [0, 3)$



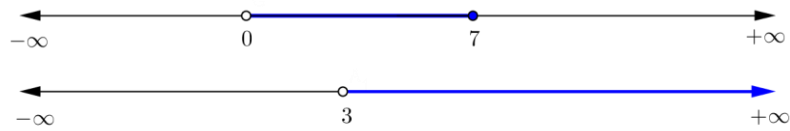
| | Intervalo | Forma algebraica | Representación recta real |
|------------|---------------------------------|--------------------------------|---------------------------|
| $A \cup B$ | $(-\infty, 3)$ | $\{x \in \mathbb{R} / x < 3\}$ | |
| $A \cap B$ | \emptyset (conjunto vacío) | ----- | ----- |

d) $A = \{x \in \mathbb{R} / x \geq -5\} = [-5, +\infty)$ y $B = \{x \in \mathbb{R} / -3 > x\} = (-\infty, -3)$



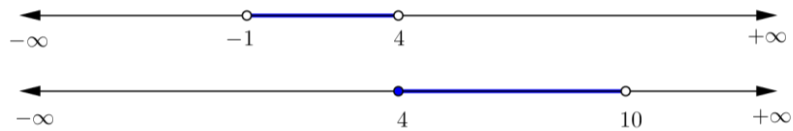
| | Intervalo | Forma algebraica | Representación recta real |
|------------|-----------------------------------|---|---------------------------|
| $A \cup B$ | $(-\infty, +\infty) = \mathbb{R}$ | ----- | |
| $A \cap B$ | $[-5, -3)$ | $\{x \in \mathbb{R} / -5 \leq x < -3\}$ | |

e) $A = \{x \in \mathbb{R} / 0 < x \leq 7\} = (0, 7]$ y $B = \{x \in \mathbb{R} / 3 < x\} = (3, +\infty)$



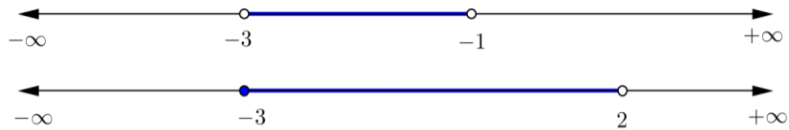
| | Intervalo | Forma algebraica | Representación recta real |
|------------|----------------|---------------------------------------|---------------------------|
| $A \cup B$ | $(0, +\infty)$ | $\{x \in \mathbb{R} / x > 0\}$ | |
| $A \cap B$ | $(3, 7]$ | $\{x \in \mathbb{R} / 3 < x \leq 7\}$ | |

f) $A = (-1, 4)$ y $B = \{x \in \mathbb{R} / 4 \leq x < 10\} = [4, 10)$



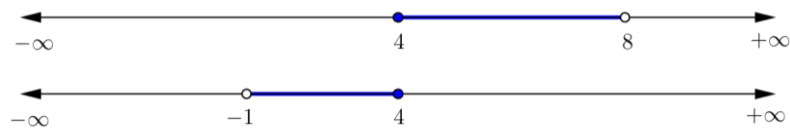
| | Intervalo | Forma algebraica | Representación recta real |
|------------|---------------------------------|--------------------------------------|---------------------------|
| $A \cup B$ | $(-1, 10)$ | $\{x \in \mathbb{R} / -1 < x < 10\}$ | |
| $A \cap B$ | \emptyset (conjunto vacío) | ----- | ----- |

g) $A = (-3, -1)$ y $B = [-3, 2)$



| | Intervalo | Forma algebraica | Representación recta real |
|------------|------------|--|---------------------------|
| $A \cup B$ | $[-3, 2)$ | $\{x \in \mathbb{R} / -3 \leq x < 2\}$ | |
| $A \cap B$ | $(-3, -1)$ | $\{x \in \mathbb{R} / -3 < x < -1\}$ | |

h) $A = [4, 8)$ y $B = (-1, 4]$



| | Intervalo | Forma algebraica | Representación recta real |
|------------|-----------|-------------------------------------|---------------------------|
| $A \cup B$ | $(-1, 8)$ | $\{x \in \mathbb{R} / -1 < x < 8\}$ | |
| $A \cap B$ | $\{4\}$ | $\{x \in \mathbb{R} / x = 4\}$ | |