

TD AL3 : ADC

ADC 1

$$\mathcal{P}(\{2, 4, 6\}) = \{ \emptyset, \{2\}, \{4\}, \{6\}, \{2, 4\}, \{2, 6\}, \{4, 6\}, \{2, 4, 6\} \}$$

ADC 2

des éléments de  $F$  sont des  $u = (x, y, z) \in \mathbb{R}^3$ .

soit  $u = (x, y, z) \in \mathbb{R}^3$ .

$$u \in F \Leftrightarrow \begin{cases} x + y + z = 0 \\ 2x - y + z = 0 \\ -x + 5y + z = 0 \end{cases}$$

$$\Leftrightarrow \begin{cases} x + y + z = 0 \\ 2 - 2y = 0 \\ -2x + 4y = 0 \end{cases} \quad \begin{matrix} L_2 \leftarrow L_2 - L_1 \\ L_3 \leftarrow L_3 - L_1 \end{matrix} \quad L_3 = -2L_2$$

$$\Leftrightarrow \begin{cases} 3y + z = 0 \\ x - 2y = 0 \end{cases} \quad L_1 \leftarrow L_1 - L_2$$

$$\Leftrightarrow \begin{cases} z = -3y \\ x = 2y \end{cases}$$

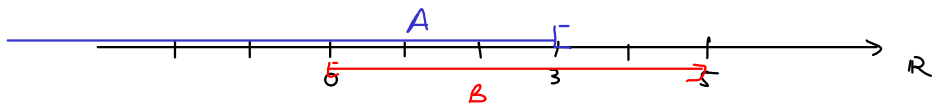
$$\Leftrightarrow u = (2y, y, -3y) \quad \text{avec } y \in \mathbb{R}.$$

Donc

$$F = \{ (2y, y, -3y) \mid y \in \mathbb{R} \}$$

10C3

$$A = ]-\infty, 3[ \quad , \quad B = [0, 5]$$



$$A \cup B = ]-\infty, 5] \quad , \quad A \cap B = [0, 3[ \quad , \quad A \setminus B = ]-\infty, 0[$$

$$B \setminus A = [3, 5] \quad ; \quad \overline{A} = [3, +\infty[ \quad , \quad \overline{B} = ]-\infty, 0[ \cup ]5, +\infty[ .$$