

$$\sqrt{4} = 2 \quad \mathbb{N} \cup \mathbb{N} \quad \pm 2$$

$$A = \left\{ x \in \mathbb{R} : x^2 - x \geq 0 \right\}$$

$$B = \left\{ x \in \mathbb{R} : x + 1 < 0 \right\}$$

$$x^2 - x \geq 0$$

$$x^2 - x \leq 0$$

$$x(x-1) = 0$$

$$x = 0$$

$$x - 1 = 0 \quad x = 1$$

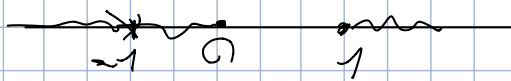
$$g(x) = x^2 - x$$



$$x \leq 0 \quad x \geq 1$$

$$B = \left\{ x \in \mathbb{R} : x < -1 \right\}$$

$$A \cap B = B$$



$$A = \left\{ x \in \mathbb{R} : x \leq 0 \vee x \geq 1 \right\}$$

$$A \cap B = \left\{ x \in \mathbb{R} : x < -1 \right\}$$

a) F $x^2 - x \geq 0$

b) F $x^2 - x \leq 0$

$$01) \sqrt{x^2 - x} > x + 1$$

C. B:

$$\begin{cases} x^2 - x \geq 0 \\ x + 1 < 0 \end{cases}$$

← e rimolomolomfl

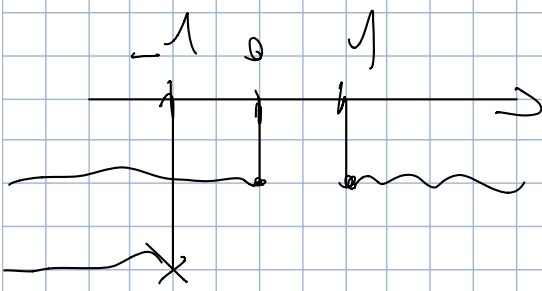
$$\cup \begin{cases} x^2 - x \geq 0 \\ x + 1 \geq 0 \\ x^2 - x > (x + 1)^2 \end{cases}$$

$$\begin{cases} x \leq 0 & x \geq 1 \\ x < -1 \end{cases}$$

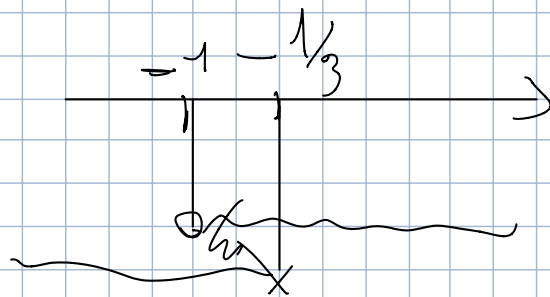
$$\cup \begin{cases} x \geq -1 \\ x^2 - x > x^2 + 2x + 1 \end{cases} \begin{cases} x \geq -1 \\ x < -\frac{1}{3} \end{cases}$$

$$\begin{cases} x \leq 0 & x \geq 1 \\ x < -1 \end{cases}$$

$$\cup \begin{cases} x \geq -1 \\ x < -\frac{1}{3} \end{cases}$$



$$x < -1$$



$$-1 \leq x < -\frac{1}{3}$$

$$S: S_1 \cup S_2$$

$$x < -\frac{1}{3}$$