

ESEMPIO

$$\sqrt{9+x^2} \geq x+1$$

$A(x)$        $B(x)$

↓

$$\textcircled{*} \quad \left\{ \begin{array}{l} 9+x^2 \geq 0 \\ x+1 < 0 \end{array} \right. \cup \left\{ \begin{array}{l} 9+x^2 \geq (x+1)^2 \\ x+1 \geq 0 \end{array} \right.$$

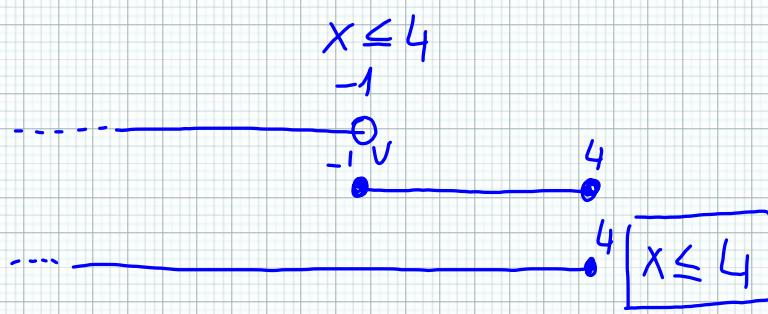
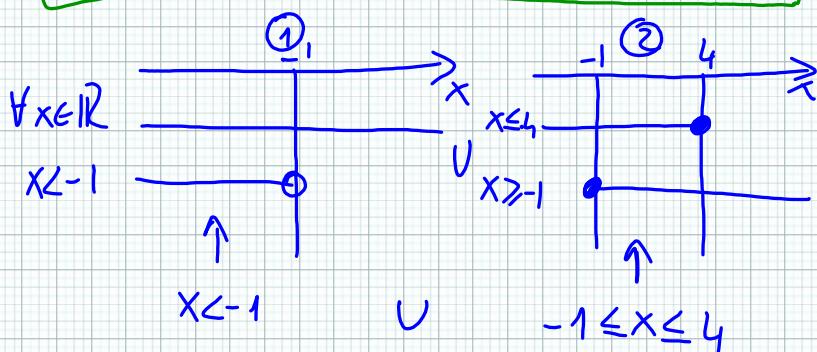
$$\left\{ \begin{array}{l} \forall x \in \mathbb{R} \\ x < -1 \end{array} \right. \cup \left\{ \begin{array}{l} 9+x^2 \geq x^2 + 1 + 2x \\ x \geq -1 \end{array} \right.$$

$$\textcircled{1} \quad \left\{ \begin{array}{l} \forall x \in \mathbb{R} \\ x < -1 \end{array} \right. \cup \left\{ \begin{array}{l} x \leq 4 \\ x \geq -1 \end{array} \right. \quad x \leq 4$$

(\*)  $x^2 + 9 \geq 0 \quad x^2 + 9 = 0 \quad x^2 = -9$  mai!

+  $\cup$  +

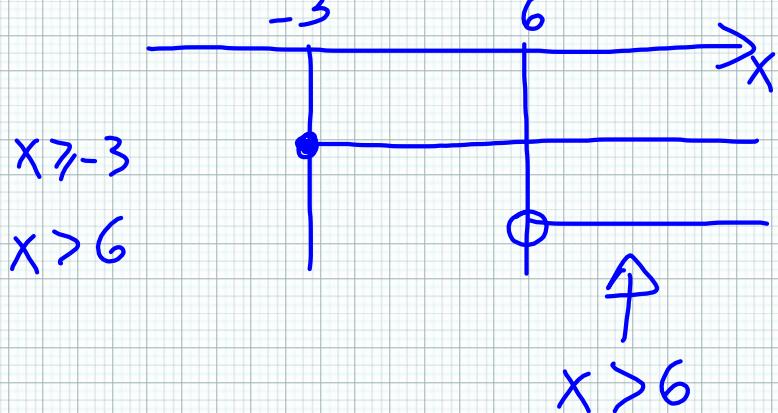
→  $x$



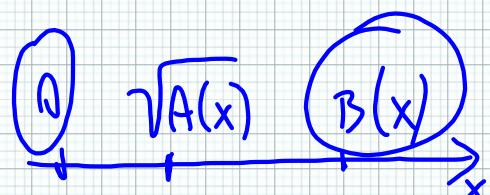
ESEMPIO

$$\sqrt{x+3} > 3$$

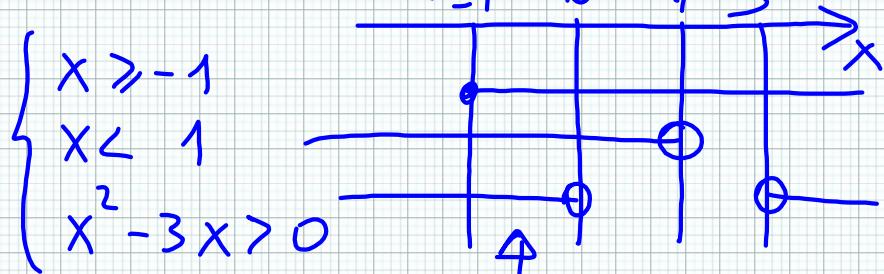
C.E.  $\begin{cases} x+3 \geq 0 \\ x+3 > 9 \end{cases} \quad \begin{cases} x \geq -3 \\ x > 6 \end{cases}$

ESEMPIO

$$\sqrt{x+1} < 1-x$$

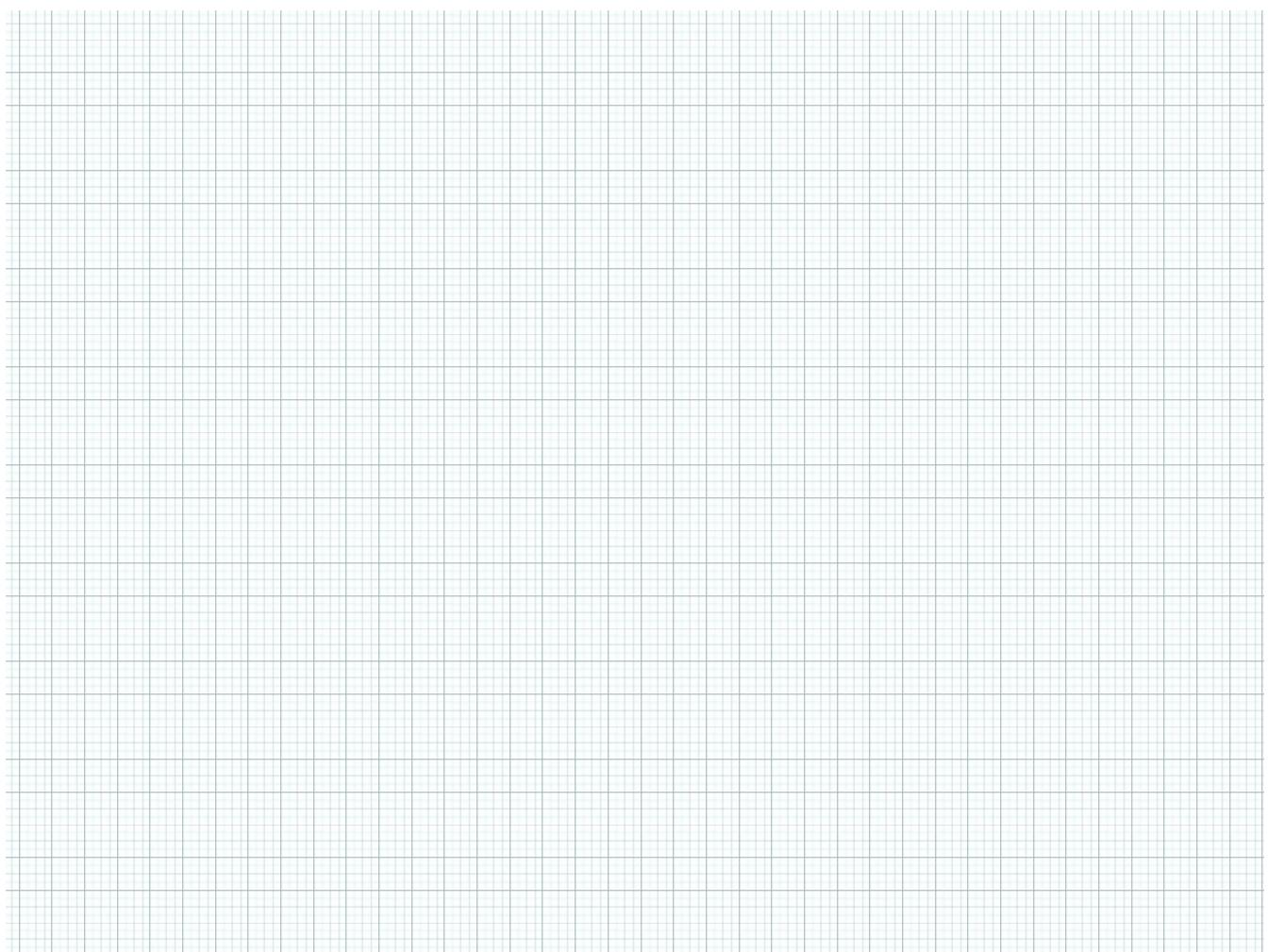


C.E.  $\begin{cases} x+1 \geq 0 \\ 1-x > 0 \\ x+1 < (1-x)^2 \end{cases} \quad \begin{cases} x \geq -1 \\ x < 1 \\ x+1 < 1+x^2 - 2x \end{cases}$



$$\boxed{-1 \leq x < 0}$$

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