

TEOREMA 6.

2.7

$$\lim a_m = l > k \Rightarrow \exists v \in \mathbb{N}: \forall m > v, a_m > k$$

DIM.

$$\lim a_m = l \stackrel{\text{DEF}}{\iff} \forall I(l), \exists v \in \mathbb{N}: \forall m > v, a_m \in I(l)$$

$$I(l) =]k, +\infty[$$

$$a_m \in]k, +\infty[\iff k < a_m$$

□

COR. 1. - (PERMANENZA DEL SEGNO)

$$\lim a_m = l > 0 \Rightarrow \exists v \in \mathbb{N}: \forall m > v, a_m > 0$$

COR. 2. -

$$\left[\begin{array}{l} \text{i) } \exists v \in \mathbb{N}: \forall m > v, k \leq a_m \\ \text{ii) } \lim a_m = l \end{array} \right] \Rightarrow k \leq l$$

DIM.

$$\text{p.a. } k > l \Rightarrow \exists v_1 \in \mathbb{N}: \forall m > v_1, k > a_m$$

□