

Esercizio 1. Let $\varphi(z) \in L(A)$ be a consistent formula. Prove that, if $a \in \text{acl}(A, b)$ for every $b \models \varphi(z)$, then $a \in \text{acl}(A)$. Prove the same claim with a type $p(z) \subseteq L(A)$ for $\varphi(z)$.

Esercizio 2. Prove that the following is a sufficient condition for weak elimination of imaginaries

‡ $\mathcal{D} \subseteq \mathcal{U}^{|\mathcal{X}|}$ is definable both over A and over B , then it is definable over $A \cap B$.