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

Esercizio 2. Let T be a complete theory without finite models. Prove that the following are equivalent

1. M is minimal;
2. $a \equiv_M b$ for every $a, b \in \mathfrak{U} \smallsetminus M$.

Esercizio 3. Let T be strongly minimal. Prove that every infinite algebraically closed set is a model.