## Class Problem

Math 2513
2/3/05

THEOREM: Let $A$ and $B$ be sets. If $B \subseteq A$ then $A \cap B=B$.

Problem. (a) Clearly state the hypothesis of this Theorem and its conclusion.
(b) What are all of the relevant definitions for this Theorem?
(c) Prove the Theorem.

In part (c) you may use the following result:
Theorem 3: Let $A$ and $B$ be sets. Then $A \cap B$ is a subset of $B$.

