

Math 131
Warm-up 26

Name:

Let (E, d) be a metric space. Let $A \subseteq E$. Prove that if (A, d) is disconnected, then there are open sets U and V in E such that $A \subseteq U \cup V$, $A \cap U \neq \emptyset$, $A \cap V \neq \emptyset$, $A \cap U \cap V = \emptyset$.