## Math 131 Warm-up 13

Name:

Let (E, d) be a metric space, and let  $A \subseteq E$ . Let  $p \in E$  such that for every  $\varepsilon > 0$  there is a point  $x \in A$  such that  $0 < d(x, p) < \varepsilon$ . Prove that p is a cluster point of A.