



Math for the people, by the people.

adherent point

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Let X be a topological space and $A \subset X$ be a subset. A point $x \in X$ is an *adherent point* for A if every open set containing x contains at least one point of A . A point x is an adherent point for A if and only if x is in the closure of A .

Note that this definition is slightly more general than that of a limit point, in that for a limit point it is required that every open set containing x contains at least one point of A different from x .

References

- [1] L.A. Steen, J.A. Seebach, Jr., *Counterexamples in topology*, Holt, Rinehart and Winston, Inc., 1970.