

Exercises

E8.14 [OGJ] Topics: closure, interior. Let X be a topological space and $A \subseteq X$ open.

1. Show that $A \subseteq (\overline{A})^\circ$ (the interior of the closure of A).
2. Find an example of an open set $A \subset \mathbb{R}$ for which $A \neq (\overline{A})^\circ$.
3. Then formulate a similar statement for A closed, transitioning on to the complement.

Solution 1. [OGK]