

## 0.1 Boundries and interiors

The boundry of the subset  $S$  of a topology is the intersection with the closure of  $S$  with the closure of the complement of  $S$ .

So the boundry of both  $(0, 1)$  and  $[0, 1]$  are 0 and 1.

The interior of  $S$  is  $S$  without the boundry.

So the interior of  $(0, 1)$  and  $[0, 1]$  are both  $(0, 1)$ .