

## 12.1 Semi continuity

[2CV]

Let  $(X, \tau)$  be a topological space.

**Definition 12.1.** [138]

Note that  $f$  is *lower semi continue* if and only if  $(-f)$  is *upper semi continue*: so in many subsequent exercises we will only see cases *l.s.c.* cases.

**Exercises**

E12.2 [139]

E12.3 [13C]

E12.4 [13D]

E12.5 [13G]

E12.6 [13J]

E12.7 [13M]

E12.8 [13P]

E12.9 [13R]

E12.10 [13T]

E12.11 [13W]

E12.12 [13Y]

E12.13 [13Z]