

Hw. (some shuffling) HWS on web by midnight.

The TT: At 2:55.

Read Along. Munkres 26, 27

Def. Cover, open cover, Compact.

Thm. A continuous function on a compact set is bounded

Thm. $I = [0, 1]$ is compact.

Thm. A closed subset of a compact space is compact.

Thm. A compact subset of a T_2 space is closed.

Corollary. A compact T_2 space is T_3 .

Corollary. A subset of \mathbb{R} is compact iff it is closed and bounded.

Thm. The image of a compact set by a continuous function is compact.

Corollary. The maximal value theorem.

Corollary done,
pf of thm not.

Thm. A finite product of compact spaces is compact (and vice-versa, if all spaces are non-empty).

} on board