Exercises

E10.10.5 [OV8] Let (X, d_X) and (Y, d_Y) be metric spaces, with (X, d_X) compact; suppose that $f : X \to Y$ is continuous and injective. Show that f is a homeomorphism between X and its image $f(X)$.

Solution 1. *[OV9]*

(See [OJ8] for the case of topological space).