Exercises

E10.b.26 [OPY] Prerequisites: [OP1], [ONH].

Let $D(x, r) \stackrel{\text{def}}{=} \{y \in X : d(x, y) \leq r\}$ be the disk, show that it is closed.

Let $S(x, r) \stackrel{\text{def}}{=} \{y \in X : d(x, y) = r\}$ be the sphere, show that it is closed.

Solution 1. [OPZ]