Exercises

E3.58 [252]Prerequisites:[23T],[026],[1Y0],[00S]. Let A be a non-empty set; we define B as the set that contains all the elements that are in all the elements of A. Write a well-formed formula that defines B, prove that B is indeed a set, and show that it is unique; for symmetry with the axiom [026] we will indicate it with

$$B = \underline{\bigcap} A \quad .$$

It is related to the usual notation by the relation

$$\underline{\bigcap} A = \bigcap_{x \in A} x \quad .$$

Solution 1. [254]