

## Exercises

E3.36 [013] Given  $A$  a set, and  $P(x)$  a proposition dependent on a free variable  $x$ , we usually write

$$\exists!x \in A, P(x)$$

when there is one and only one element  $x$  of  $A$  for which  $P(x)$  is true. Define this notation with a well-formed formula. (Note that you will need to use the equality connective, because you must be able to express the idea of "unique", which needs of a method to be able to tell when two objects are distinguishable and when they are not).

**Solution 1.** [015]