Exercises

E3.51 [O1N] *(Solved on 2022-10-25)* Prerequisites: [1Y9]. The *ordered pair* is defined as

$$(x, y) \stackrel{\text{def}}{=} \{\{x\}, \{x, y\}\} \quad ;$$

(note that the *axiom of pairing* [1Y3] guarantees us that this is a good definition); show that

$$(a, b) = (x, y) \iff (a = x \wedge b = y) \quad . \tag{3.51}$$

(First solution that doesn't use [1Y9])

Solution 1. [1WZ]

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(Second solution using [1Y9])

Solution 2. [1YC]

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