

Exercise 3.74. [1YD] Prerequisites: [1Y9], [01R]. Let's imagine a different definition for the ordered pair, defined as

$$\langle\!\langle x, y \rangle\!\rangle \stackrel{\text{def}}{=} \{x, \{x, y\}\} \quad ;$$

show that

$$\langle\!\langle a, b \rangle\!\rangle = \langle\!\langle x, y \rangle\!\rangle \iff (a = x \wedge b = y) \quad . \quad (3.75)$$

To show it you will need [01R].

Solution 1. [1YF]