VII.5. Which ordered pairs are in the relation $R = \{(x, y) \mid x > y\}$ on the set $A = \{1, 2, 3, 4\}$?

Solution:

$$4 > 3, \quad 4 > 2, \quad 4 > 1, \quad 3 > 2, \quad 3 > 1, \quad 2 > 1$$

$$R_A = \{(4, 3), (4, 2), (4, 1), (3, 2), (3, 1), (2, 1)\}$$