Problem ♡-1

Due in DSC 235 by 12 noon, Friday, September 15, 2017

Are there rational numbers x, y, z, t such that

$$1 + \sqrt{2} = (x + y\sqrt{2})^2 + (z + t\sqrt{2})^2 \quad ?$$

Rules:

- The competition is open to all undergraduate UNO students.
- Please submit your solutions to Andrzej Roslanowski in DSC 235 or to his mailbox. (Needles to say, they should be be written clearly and legibly.)
- The winners will be determined each semester based on the number of correct solutions submitted.
- There will be prizes. Details will be announced later.
- Problems will be posted by Monday noon and the solutions are due by the following Friday noon.