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Ira Rosenholtz* (cfir@eiu.edu), Department of Mathematics, Eastern Illinois University, 600 Lincoln Avenue, Charleston, IL 61920. *The Cantor-Schröder-Bernstein Theorem, Yente the Matchmaker's Marriage Theorem, and Why ONE Point Determines a Straight Line.*

The object of this talk is to show that ONE point determines a straight line, not the two postulated by Euclid. That is, we'll show that there is a one-to-one and onto function from the set P of all points in the plane to the set L of all lines in the plane with the additional property that if line ℓ corresponds to point p , then p lies on ℓ .

While it isn't difficult to provide a proof that such a function exists based on well-orderings, such proofs are not constructive. So, instead, we'll begin with one of the classical proofs of the Cantor-Schröder-Bernstein Theorem, derive Yente the Matchmaker's Marriage Theorem, and then show that such a function exists as a consequence. Finally, we'll actually construct such a function, one that is very geometric in nature. (Received September 03, 2000)