## Handout 13

## **Constructing a Square**

## **Student Activity:**

1. Write down as many generalizations (theorems, definitions, properties, and corollaries) as you can that are related to the square.

For example: A square is a parallelogram with a right angle and two adjacent sides equal in length.

(We shall want you to discuss your responses with the rest of the group, so please write them on OHP transparency).

- 2. Think about which of these generalizations can be used to construct a square using Cinderella. Come up with as many different and various methods as you can to construct a square using Cinderella. In each construction method, you should:
  - List the construction algorithm.
  - Explain the theoretical background of the construction algorithm.
  - Justify the construction algorithm order.

3. How can the different methods of construction be classified?

Classification criteria: