Handout 9

Angular Bisectors of a Parallelogram

Student Activity:

Use Cinderella to construct a parallelogram. Construct the angular bisectors of the interior angles of the parallelogram. Generate the four intersection points of the angular bisectors.

Make a conjecture about the obtained figure. i.e. What is the figure formed by joining the four intersection points the angular bisectors of the interior angles of parallelogram?

Use Cinderella objects and tools to investigate the conjecture.

State your conjecture in the form of mathematical theorems.

Can you figure out a mathematical proof for this conjecture?

Can you pose some follow-up problems related to the original problem?