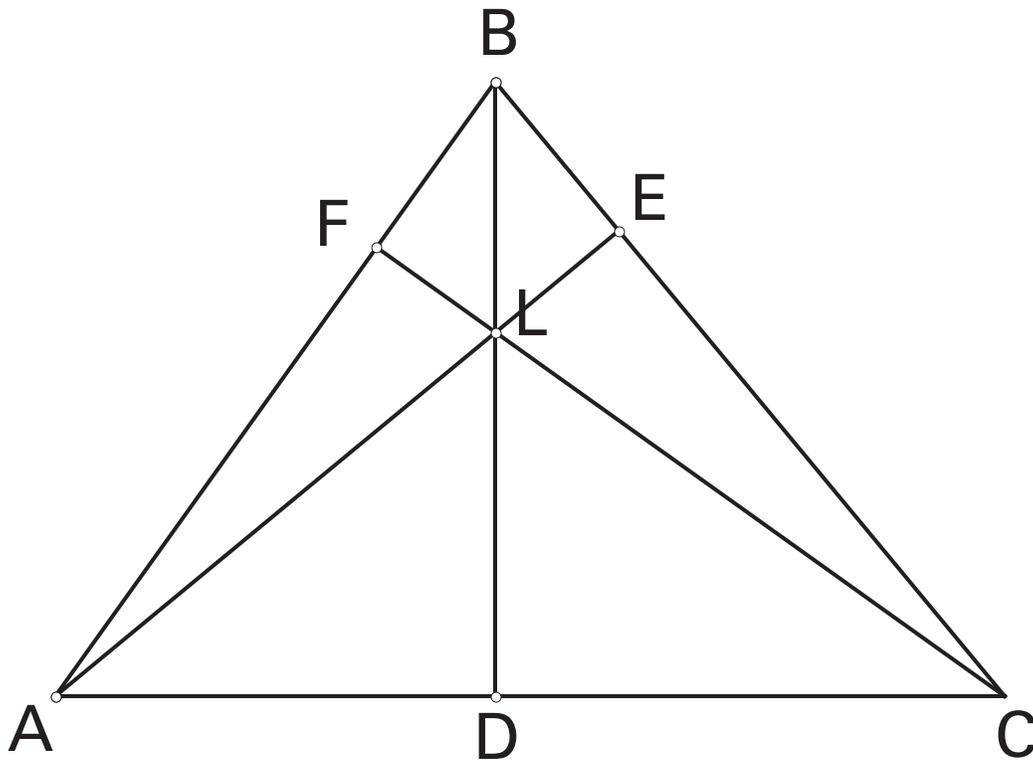


# Explaining the area of a triangle



$$AB = 3.96 \text{ inches}$$

$$CF = 4.04 \text{ inches}$$

$$AC = 4.97 \text{ inches}$$

$$DB = 3.22 \text{ inches}$$

$$BC = 4.18 \text{ inches}$$

$$AE = 3.83 \text{ inches}$$

$$m\angle AFC = 90^\circ$$

$$m\angle AEC = 90^\circ$$

$$m\angle BDC = 90^\circ$$

$$\text{Area } \triangle ABC = 8.00 \text{ inches}^2$$

Explain in three different ways why the area of triangle ABC is 8 square inches. (Measurements are rounded to 2 decimal places.)

**Extension:** What is point L called?