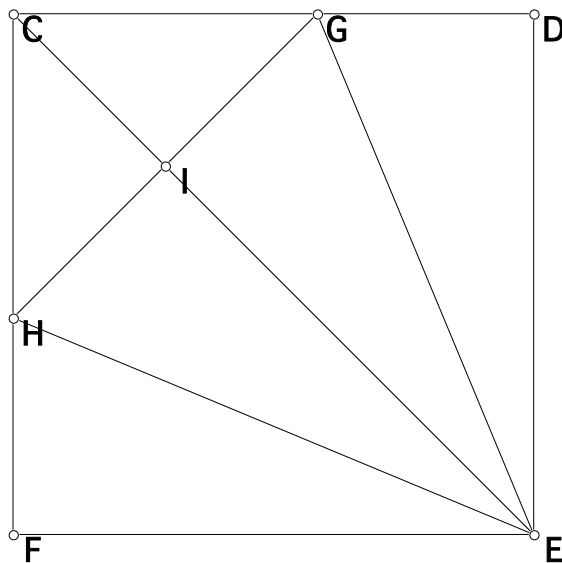


## Angle Investigation, Origami Duck

Before completing, after stage 3, unfold the square to the shape below:



1. CE bisects  $\angle FED$ . Write a congruence statement based on this conclusion.

\_\_\_\_\_

2. GE bisects  $\angle CED$ . Write a congruence statement based on this conclusion.

\_\_\_\_\_

3. Determine the measures of the following angles, AND give a geometric reason or explanation that supports your answer:

a. What is  $m\angle CED$ ? \_\_\_\_\_

b. What is  $m\angle GED$ ? \_\_\_\_\_

c. What is  $m\angle EGD$ ? \_\_\_\_\_

d. What is  $m\angle CGE$ ? \_\_\_\_\_

e. What is  $m\angle CIG$ ? \_\_\_\_\_