Figure 1: Figure for Euclid I.29

The statement is: If lines $\overleftrightarrow{AB}$ and $\overleftrightarrow{CD}$ are parallel and line $\overleftrightarrow{GH}$ is a transversal, then

(a) alternate interior angles are equal,

(b) corresponding angles are equal, and

(c) the interior angles on one side of the transversal add to two right angles.