

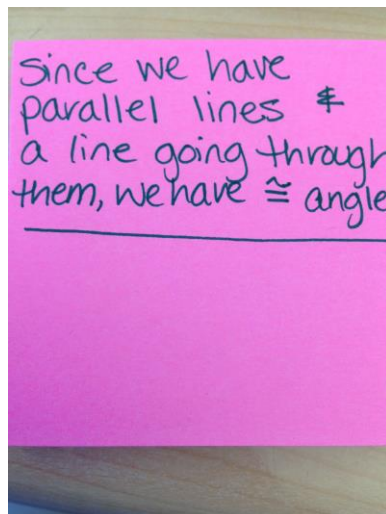
Hands On Proof

Given: $\overline{EG} \parallel \overline{DF}$, $\overline{EG} \cong \overline{DF}$
 Prove: $\overline{ED} \parallel \overline{GF}$

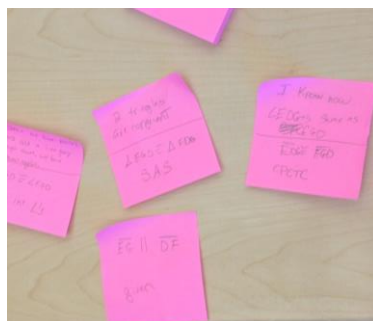


Step 1: Put students in groups of 2-3. As a group discuss how they would prove this problem. Keep it informal. It is just the students talking about how they would prove it (in their own words, not necessarily mathematical terms).

Step 2: Hand them a stack of sticky notes. Have each group right each step in their own words on the top half of sticky notes (each step on it's own sticky note).



Step 3: On the bottom half of the sticky notes have the students translate the steps into mathematical notation with mathematical reasons (statement with reason).



Step 4: Now the students will get up and pick a bare part of the board and start ordering their steps in a logical sequence.



Step 5: Students need to then draw arrows showing the flow of the proof.

Step 6: Have the students then right their flow proof as a two-column proof.

Step 7: As a class compare proofs. (Teacher: make sure to have multiple examples ready to show, plus wrong examples to show to help form more discussion)

