Triangle Proofs with CPCTC

Sometimes it's not enough to just show two triangles are congruent. At times, you need to prove the PIECES are congruent. Recall

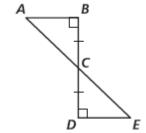
CPCTC:

Sometimes the given information isn't stated. Use the picture to tell what is given. Some information will be marked, other information may not be. Assume nothing!

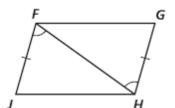
Use the steps to prove the triangles congruent, then use CPCTC to show the parts are congruent. Do the odds as traditional two-column proofs. Do the evens as paragraph proofs.

1. Given: $\overline{BD} \perp \overline{AB}, \overline{BD} \perp \overline{DE}, \overline{BC} \cong \overline{CD}$

Prove: $\angle A \cong \angle E$

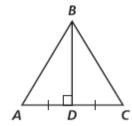


2. Given: $\overline{FJ} \cong \overline{GH}$, $\angle JFH \cong \angle GHF$ Prove: $\overline{FG} \cong \overline{JH}$

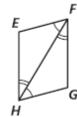


Use the picture to find the information that is given. Use that to prove the statement. Do the odds as traditional two-column proofs. Do the evens as paragraph proofs.

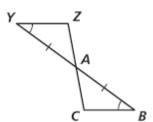
3. $\angle A \cong \angle C$



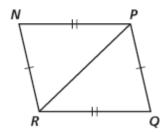
4. $\overline{HE} \cong \overline{FG}$



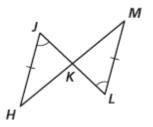
5. $\overline{ZA} \cong \overline{AC}$



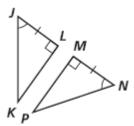
6. ∠*N* ≅ ∠*Q*



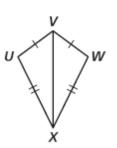
7. $\overline{JK} \cong \overline{KL}$



8. $\angle K \cong \angle P$



9. $\angle U\cong \angle W$



10. $\overline{FG}\cong \overline{DG}$

