NAME _____ DATE _____

Practice

Student Edition
Pages 214–221

More Congruent Triangles

Draw and label triangles MNO and XYZ. Indicate the additional pairs of corresponding parts that would have to be proved congruent in order to use the given postulate or theorem to prove the triangles congruent.

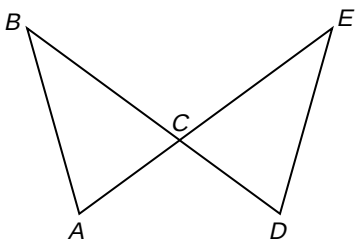
1. $\angle N \cong \angle Y$ and $\overline{NO} \cong \overline{YZ}$ by ASA

2. $\angle O \cong \angle Z$ and $\angle M \cong \angle X$ by AAS

3. $\angle O \cong \angle Z$ and $\overline{MO} \cong \overline{XZ}$ by AAS

4. $\angle N \cong \angle Y$ and $\angle M \cong \angle X$ by ASA

5. The statements in the following proof are *not* in logical order. Rearrange them in a correct sequence and give the reasons.



Given: $\angle A \cong \angle D$
$\overline{AB} \cong \overline{DE}$
Prove: $\overline{CA} \cong \overline{CD}$
Proof:

Statements	Reasons
a. $\triangle CAB \cong \triangle CDE$	**a.** _____
b. $\angle A \cong \angle D$	**b.** _____
c. $\angle BCA \cong \angle ECD$	**c.** _____
d. $\overline{CA} \cong \overline{CD}$	**d.** _____
e. $\overline{BA} \cong \overline{ED}$	**e.** _____

6. Eliminate the Possibilities Barky, Spot, and Tiger are dogs. One is a black labrador retriever, one is a multi-colored collie, and one is a spotted dalmatian. One is owned by a doctor, one is owned by a lawyer, and one is owned by an insurance salesperson. The lawyer's dog does not have spots. The doctor's dog has more than one color. The insurance salesperson's dog is solid in color. Who owns which dog?