# Lesson 4.6: Corresponding Parts of Congruent Triangles
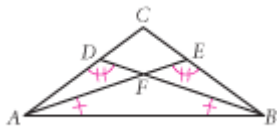
In this lesson you will:
- use the fact that corresponding parts of congruent triangles are congruent to prove statements
- learn techniques for keeping track of information when you are writing a proof

In Lessons 4.4 and 4.5, you discovered four shortcuts for showing that two triangles are congruent—SSS, SAS, ASA, SAA. Once you have established that two triangles are congruent, you know that their corresponding parts are congruent. We will abbreviate the statement *corresponding parts of congruent triangles are congruent* as CPCTC.

•Example 1: Is $\overline{AD} \cong \overline{BC}$ in the figure below? Use a deductive argument to explain why they must be congruent.
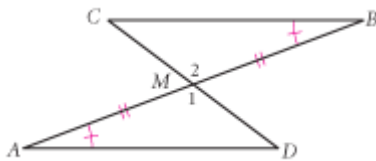
•Example 2: Is $\overline{AE} \cong \overline{BD}$ in the figure below? Write a paragraph proof explaining why.

⇒**ASSIGNMENT**: _____