

Name:

Class:



Check Your Understanding

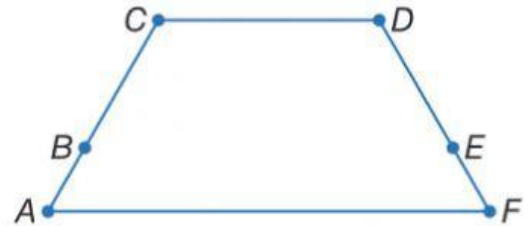
Example 1

1. Copy and complete the proof.

Given: $\overline{AB} \cong \overline{FE}$, $\overline{BC} \cong \overline{ED}$

Prove: $\overline{AC} \cong \overline{FD}$

Proof:



Statements	Reasons
a. $\overline{AB} \cong \overline{FE}$, $\overline{BC} \cong \overline{ED}$	a.
b.	b. Definition of congruent segments
c. $AB + FE = BC + ED$	c.
d.	d. Segment Addition Postulate
e. $AC = FD$	e.
f. $\overline{AC} \cong \overline{FD}$	f.

Given

$AB + BC = AC$, $FE + ED = FD$

Substitution

Definition of Congruence

$AB \cong FE$, $BC \cong ED$

Addition Property of Equality

