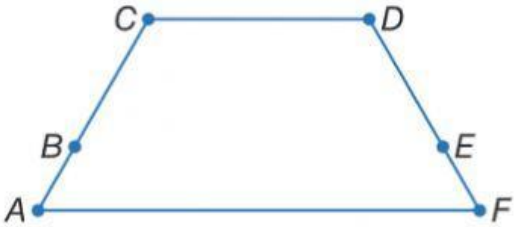
Name: ..... Class: .....

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 ≅ FE, BC ≅ ED	Addition Property of Equality

LIVEWORKSHEETS