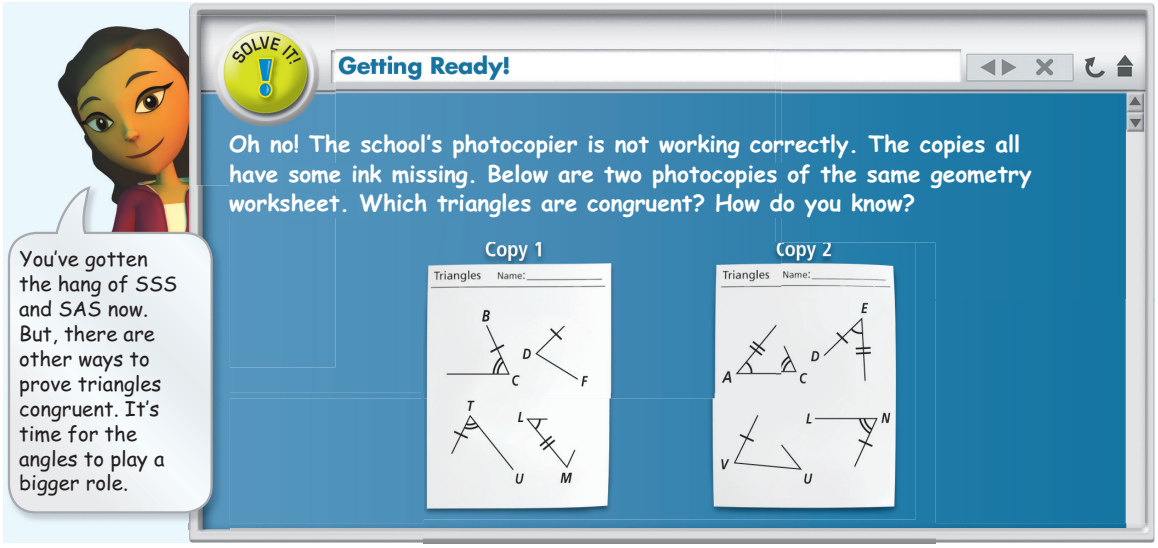
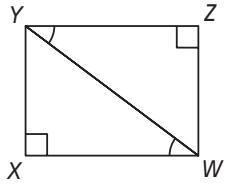
4-3 Solve It!



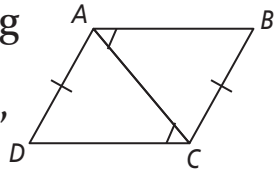
4-3 Lesson Quiz

1. Given: $\angle XWY \cong \angle ZYW$, $\angle X$ and $\angle Z$ are both right angles

Prove: $\triangle YXW \cong \triangle WZY$



2. Do you UNDERSTAND? Which of the following best represents the answer and justification to the question: "Are the triangles congruent?"



A. Yes, by ASA.

B. Yes, by AAS.

C. Yes, by SSA.

D. No, there is not enough information to prove congruence.

Answers

Solve It!

The markings indicate that $\angle L \cong \angle A \cong \angle E$, $\angle C \cong \angle T \cong \angle N$, $\overline{BC} \cong \overline{DE} \cong \overline{VT} \cong \overline{MN}$, and $\overline{LM} \cong \overline{AB} \cong \overline{EF}$. By the Third Angles Theorem, $\angle B \cong \angle M$, so $\triangle ABC \cong \triangle LMN$ by SAS.

Lesson Quiz

1. It is given that $\angle XWY \cong \angle ZYW$, and $\angle X$ and $\angle Z$ are both right angles. So, $\angle X \cong \angle Z$ because all rt $\measuredangle$ are $\cong$. $\overline{WY} \cong \overline{WY}$ by the Reflexive Property of Congruence. So, $\triangle YXW \cong \triangle WZY$ by AAS.

2. D