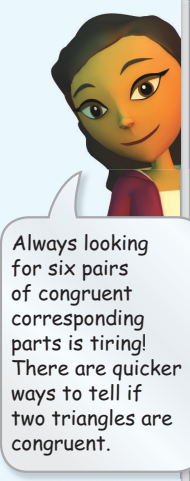


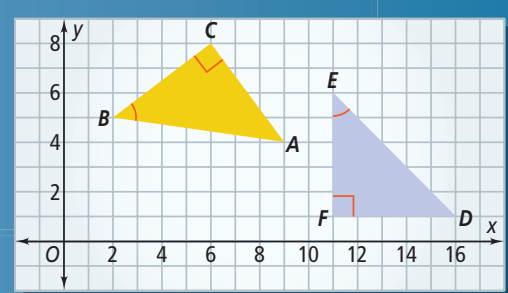
4-2 Solve It!



SOLVE IT!

Getting Ready!

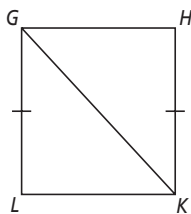
Are the triangles below congruent? How do you know?



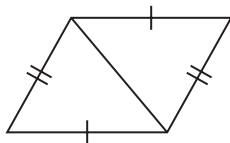
Always looking for six pairs of congruent corresponding parts is tiring! There are quicker ways to tell if two triangles are congruent.

4-2 Lesson Quiz

1. What other information do you need to prove $\triangle GHK \cong \triangle KLG$ by SAS? Explain.



2. Do you UNDERSTAND? Would you use SSS or SAS to prove the triangles congruent? If there is not enough information to prove the triangles congruent by SSS or SAS, write *not enough information*. Explain your answer.



Answers

Solve It!

Answers may vary. Sample: Yes, $\triangle ABC \cong \triangle DEF$. $\angle B \cong \angle E$ (Given) and $\angle C \cong \angle F$ (All rt. \angle s are \cong). By the Third Angles Theorem, $\angle A \cong \angle D$. By the Distance Formula,

$AB = DE = \sqrt{50}$, $BC = EF = 5$, and $AC = DF = 5$. So the two \triangle s are \cong by def. of $\cong \triangle$ s.

Lesson Quiz

1. $\angle HKG \cong \angle LKJ$; if given that $\overline{HK} \parallel \overline{GL}$, these angles

are alternate interior angles and must be congruent.

2. SSS; 2 congruent sides are given and the 3rd side is congruent by the Reflexive Property of Congruence.