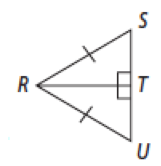
Name

Class

Date

5.6 Congruence in Right Triangles

**1. Developing Proof** Complete the paragraph proof.

**Given: **

**Prove:** *∆RUT* ≅ *∆RST*

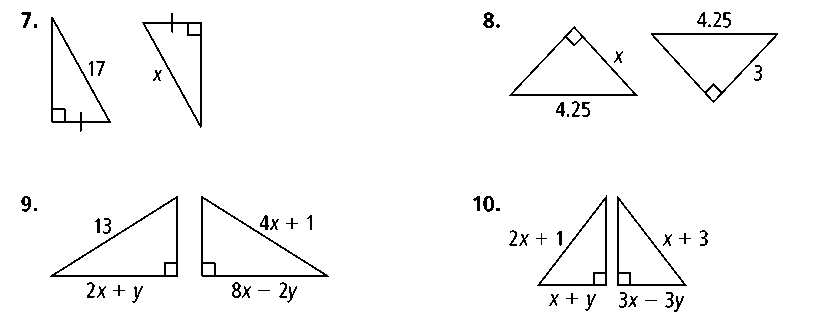
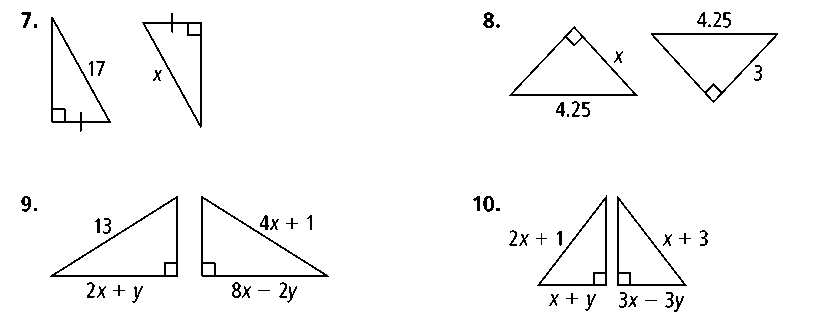
**Proof:** It is given that . So, \_\_\_\_\_ and \_\_\_\_\_\_\_are \_\_\_\_\_\_\_ angles

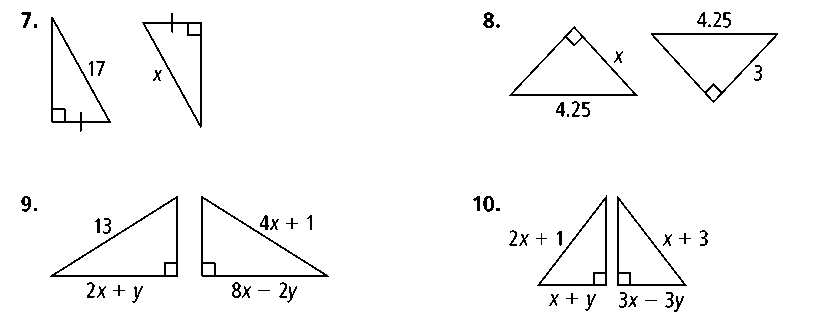
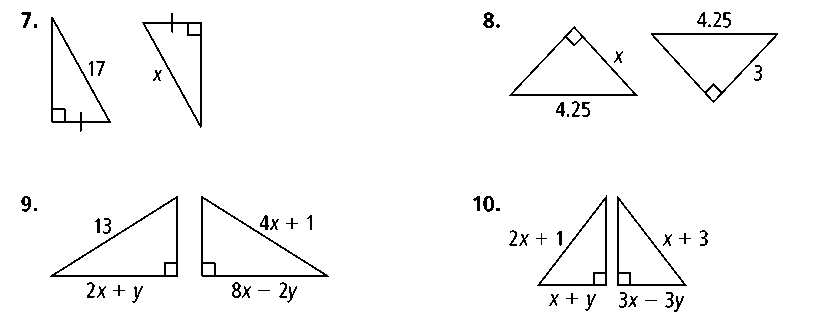
because perpendicular lines form \_\_\_\_\_\_ angles. \_\_\_\_\_\_\_ ≅ by the

Reflexive Property of Congruence. It is given that \_\_\_\_\_\_\_ ≅*.* So,  
*∆RUT* ≅ *∆RST* by \_\_\_\_\_\_\_.

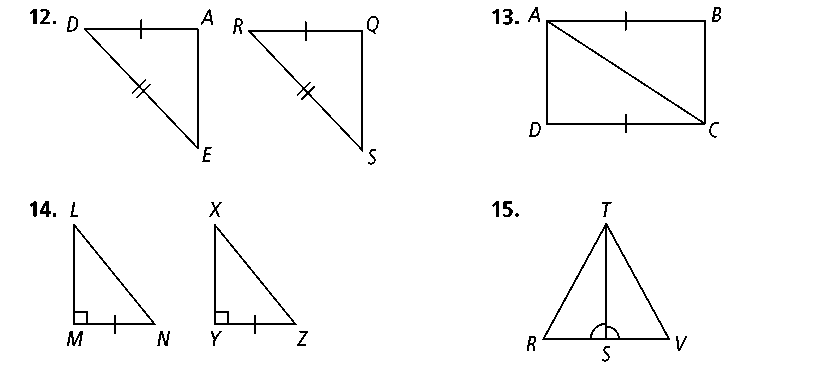
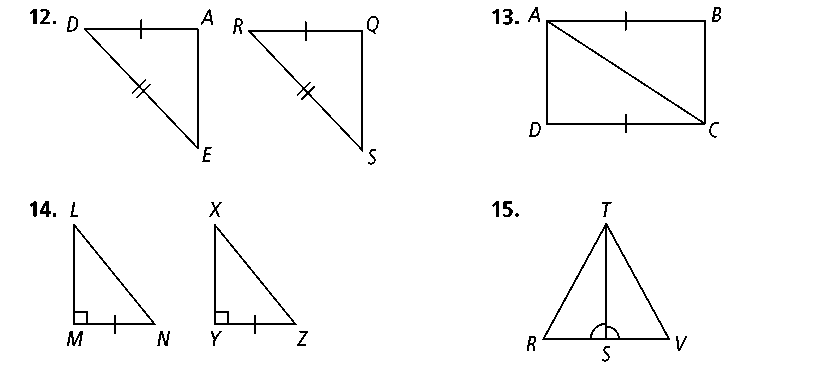
**2.** Look at Exercise 1. If *m*∠RST = 46, what is *m*∠RUT?

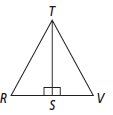
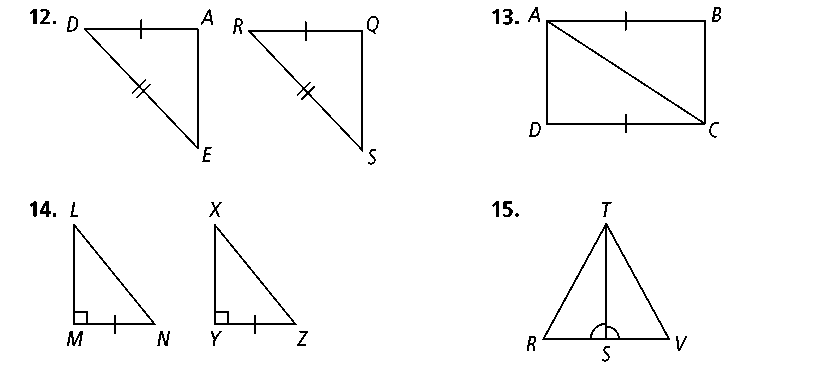
**Algebra For what values of *x* or *x* and *y* are the triangles congruent by HL?**

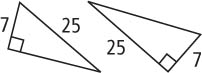
**3. 4.**

**5. 6.**

**What additional information would prove each pair of triangles congruent by the  
Hypotenuse-Leg Theorem?**

**7. 8.**

**9. 10.**

**11. Reasoning** Are the triangles congruent? Explain.