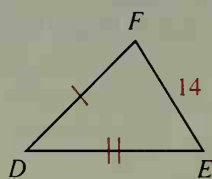
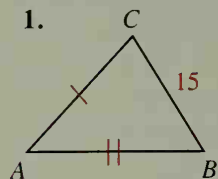


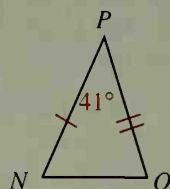
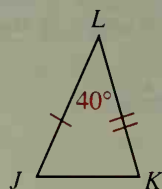
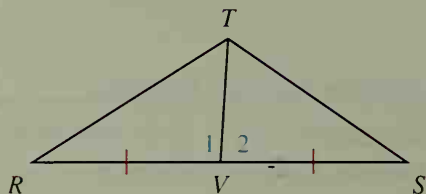
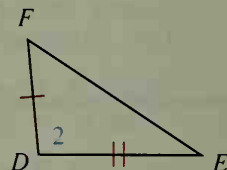
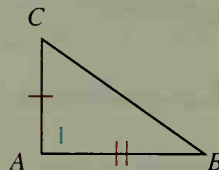
Classroom Exercises

What can you deduce? Name the theorem that supports your answer.

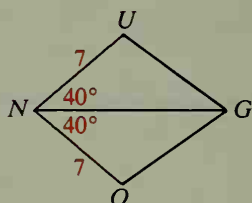
1.



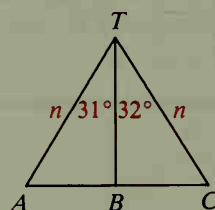
2.

3. $m\angle 1 > m\angle 2$ 4. $\angle 1$ is a rt. \angle ; $\angle 2$ is an obtuse \angle .

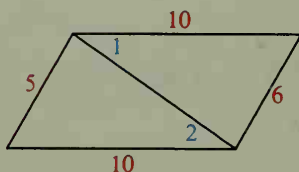
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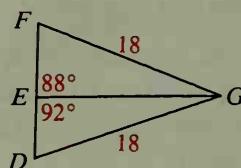
6.



7.



8.



You will need a centimeter ruler and a protractor for Exercises 9 and 10.

9. a. Draw an isosceles triangle with legs 7 cm long and a vertex angle of 120° . Measure the length of the base of the triangle.
 b. If you keep the legs at 7 cm in length but halve the measure of the vertex angle to 60° , what happens to the length of the base? What kind of triangle is this new triangle? What is the length of the third side?
10. a. Draw a right triangle with legs of 6 cm and 8 cm. Measure the length of the hypotenuse.
 b. If you keep the 6 cm and 8 cm sides the same lengths but halve the measure of the included angle to 45° , what happens to the length of the third side? Test your answer by drawing the new triangle.