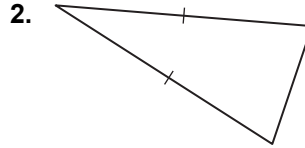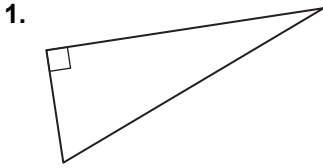Name_____ Date _____

12.1 Practice A

In Exercises 1 and 2, classify the triangle by its sides and by measuring its angles.
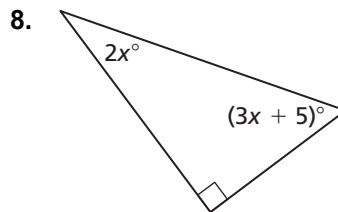
1.

2.

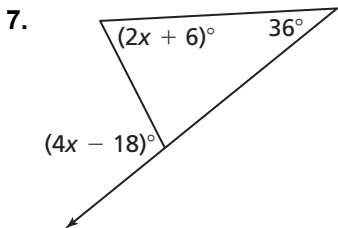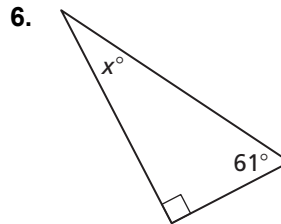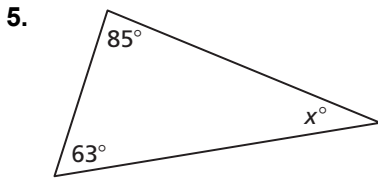**In Exercises 3 and 4, classify △QRS by its sides. Then determine whether it is a right triangle.**

3. $Q(2, 2), R(1, -2), S(-4, -4)$

4. $Q(-1, 3), R(3, 2), S(-2, -1)$

In Exercises 5–8, find the value of x.

5.

6.

7.

8.

9. The measure of one acute angle of a right triangle is 12 more than 3 times the measure of the other acute angle. Find the measure of each acute angle of the right triangle.

10. Your friend claims that the measure of an exterior angle of a triangle can never be acute because it is the sum of the two nonadjacent angles of the triangle. Is your friend correct? Explain your reasoning.

11. The figure shows the measures of various angles of a roof and its supports. Find the measure of ∠1, the angle between an eave and a horizontal support beam.