# *Activity Lesson Opener*

**For use with pages 194–201**

**SET UP: Work with a partner.**

**You will need:  • ruler  • protractor**

1. Look at the descriptions below. One person should use a ruler to draw the triangles described by their *Sides*. The other person should use a protractor to draw the triangles described by their *Angles*. Then check each other's triangles and switch roles.

   *Sides*

   • A triangle with no congruent sides

   • A triangle with 2 congruent sides

   • A triangle with 3 congruent sides

   *Angles*

   • A triangle with 1 right angle

   • A triangle with 1 obtuse angle

   • A triangle with 3 acute angles

2. With your partner, fill in the table below with sketches of triangles described by the column and row headings. For example, the arrows show that in the first box you will draw a triangle that has no congruent sides *and* 1 right angle. If a triangle with the sides and angles described is impossible, write "impossible" in the box.

|  | *1 right angle* | *1 obtuse angle* | *3 acute angles* |
|---|---|---|---|
| *No congruent sides* → | ↓ |  |  |
| *2 congruent sides* |  |  |  |
| *3 congruent sides* |  |  |  |