

Class Activity 0A: Describing a Triangle

You will need a compass, protractor, and ruler for this activity.

1. Work with two partners. Draw a triangle on a piece of paper but keep it hidden from your partners. Label the vertices of your triangle A , B , and C . Give one partner 3 pieces of information about your triangle, and give the other partner another 3 pieces of information about your triangle. (Your partners should do the same for you.) Some of the information may be the same for both partners, but the full set of information should not be the same for both partners. Record the information you gave your partners.
2. Let your partners draw triangles using the information you gave them. Are your partners' triangles congruent to yours? Use the information your partners gave you to draw triangles. Are these triangles congruent to your partners' triangles?
3. What if your partner gave you the information that her or his triangle has angles 20° , 70° , and 90° , would that be enough information to recreate your partner's triangle? Why or why not?
4. What if your partner gave you the information that her or his triangle ABC has angle 20° at point A , that AB is 2 inches long, and that BC is 1 inch long, would that be enough information to recreate your partner's triangle? Why or why not?