

Math 8 –Unit 1–Transformation & Cong–Adding the Angles in a Triangle		<i>Lesson 15</i>
<i>Students will be able to:</i>	<i>Know two of the angle measures in a triangle, I can find the third angle measure.</i>	<i>Date:</i>

Let's explore angles in triangles.

Lesson 15.1: Can You Draw It?

1. Complete the table by drawing a triangle in each cell that has the properties listed for its column and row. If you think you cannot draw a triangle with those properties, write "impossible" in the cell.
2. Share your drawings with a partner. Discuss your thinking. If you disagree, work to reach an agreement.

	acute (all angles acute)	right (has a right angle)	obtuse (has an obtuse angle)
scalene (side lengths all different)			
isosceles (at least two side lengths are equal)			
equilateral (three side lengths equal)			

Lesson 15.2: Find All Three

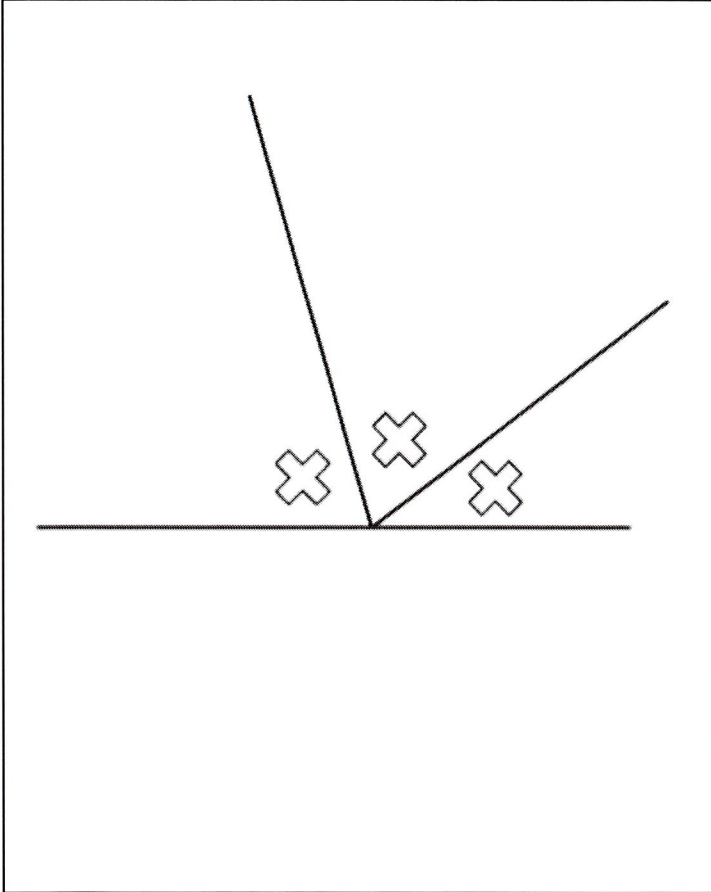
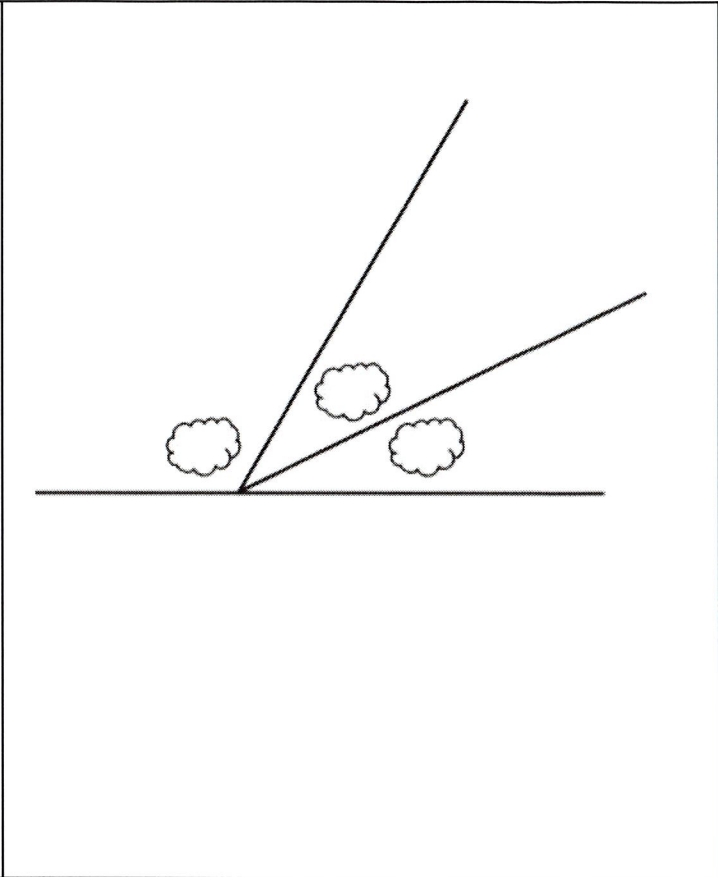
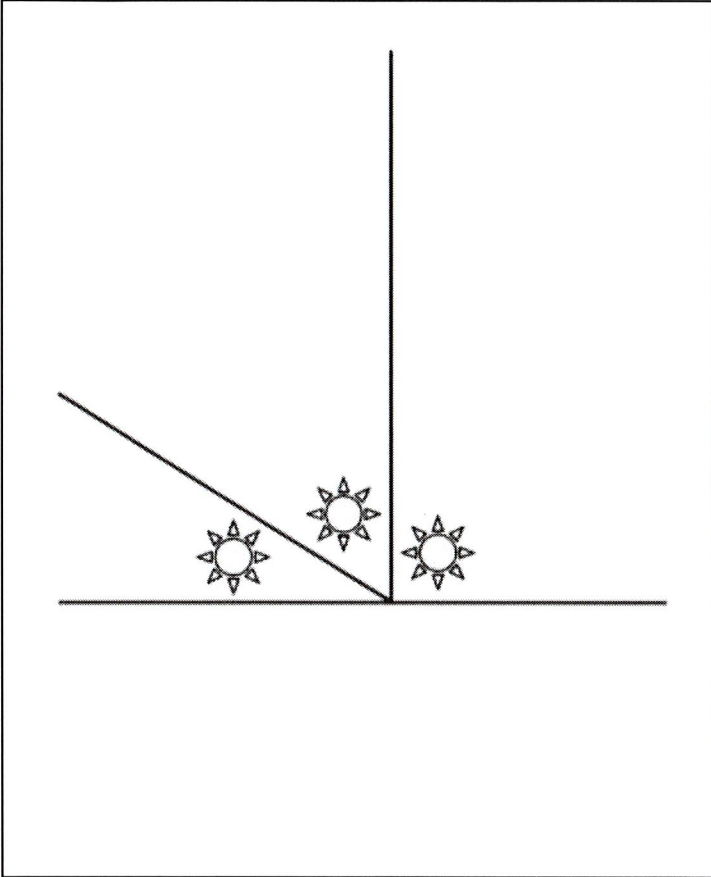
Your teacher will give you a card with a picture of a triangle.

1. The measurement of one of the angles is labeled. Mentally estimate the measures of the other two angles.
2. Find two other students with triangles congruent to yours but with a different angle labeled. Confirm that the triangles are congruent, that each card has a different angle labeled, and that the angle measures make sense.
3. Enter the three angle measures for your triangle on the table your teacher has posted.

Lesson 15.3: Tear It Up

Your teacher will give you a page with three sets of angles and a blank space. Cut out each set of three angles. Can you make a triangle from each set that has these same three angles?

Blackline Master for Classroom Activity 8.1.15.3: Tear It Up



Use a straightedge to create three of your own angles

