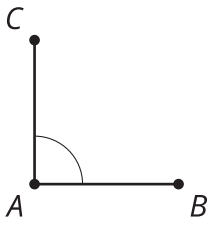
Unit 7, Lesson 2

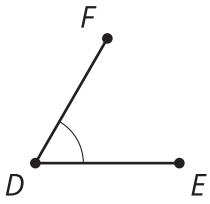
Adjacent Angles

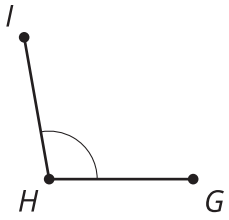
Let's look at some special pairs of angles.

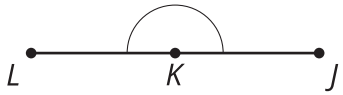
2.1 Estimating Angle Measures

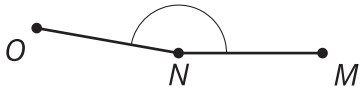
Estimate the degree measure of each indicated angle.

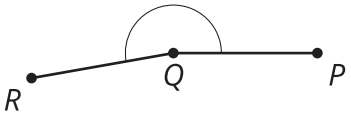


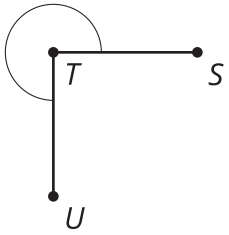


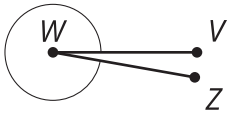










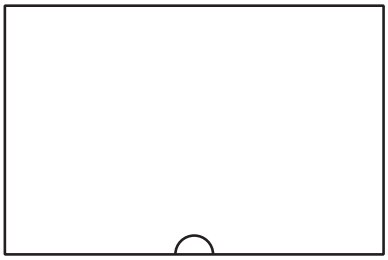


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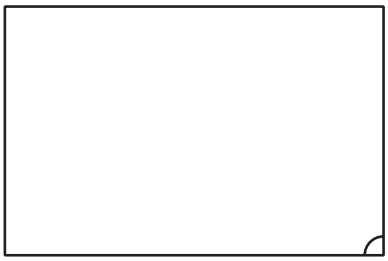
2.2 Cutting Rectangles

Your teacher will give you two small, rectangular papers.

1. On the paper with a half-circle along one side, draw and cut a straight line that starts at the center of the half-circle and goes all the way across the paper, making 2 separate pieces. On each of these two pieces, measure the angle that is marked by the arc created by part of a circle. Label the angle measure on the piece.



2. On the rectangular paper with a quarter-circle in one of the corners, follow the same instructions as you cut, measure, and label the two angles marked by the arc created by part of a circle.



3. Record your group's measurements in the table:

angles making a side	angles making a corner

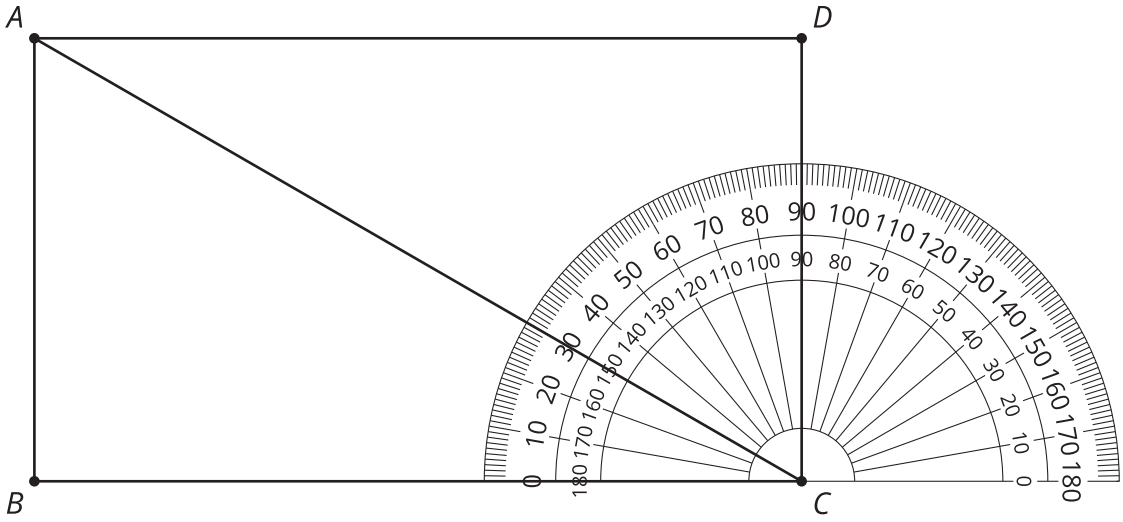
4. What do you notice about these angle measures?

5. For the angles making a side of the rectangle, Clare measured 70 degrees on one of her pieces. Predict the angle measure of her other piece.

6. For the angles making a corner of the rectangle, Priya measured 53 degrees on one of her pieces. Predict the angle measure of her other piece.

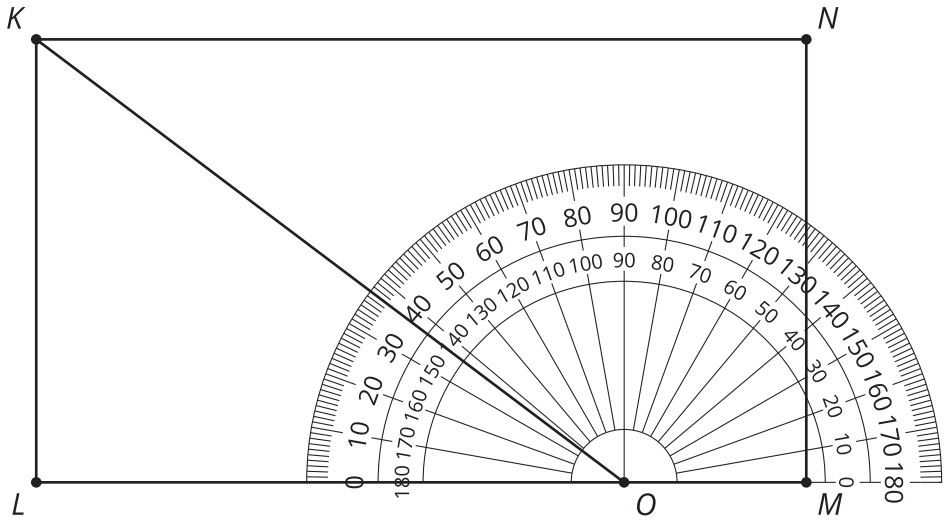
2.3 Is It a Complement or Supplement?

1. Use the protractor in the picture to find the measure of angles BCA and BCD.



2. Explain how to find the measure of angle ACD without repositioning the protractor.

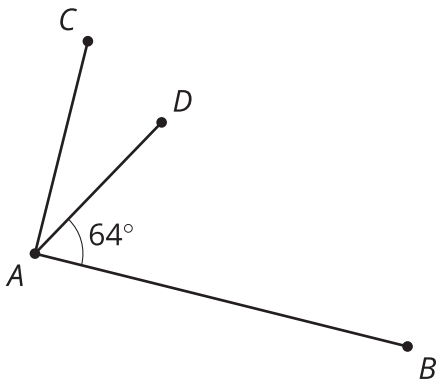
3. Use the protractor in the picture to find the measure of angles LOK and LOM.



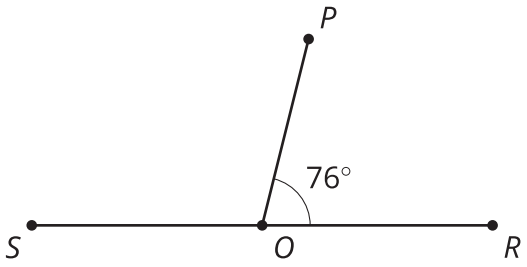
4. Explain how to find the measure of angle KOM without repositioning the protractor.

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5. Angle BAC is a right angle. Find the measure of angle CAD.



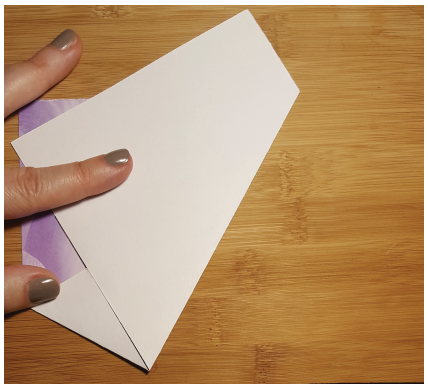
6. Point O is on line RS. Find the measure of angle SOP.



Are you ready for more?

Clare started with a rectangular piece of paper. She folded up one corner, and then folded up the other corner, as shown in the photos.





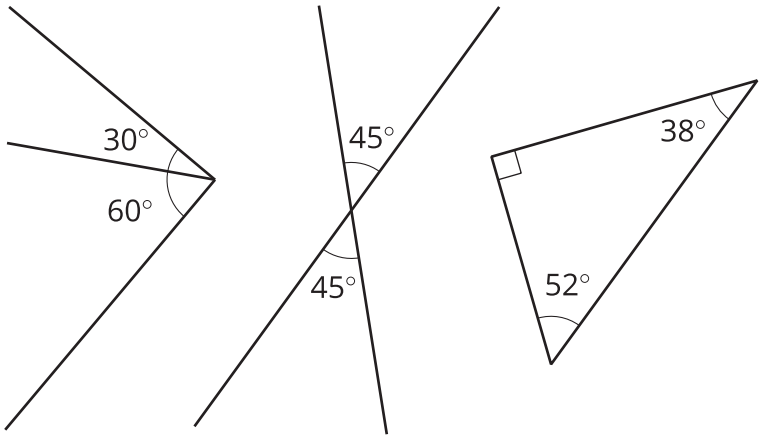


1. Try this yourself with any rectangular paper. Fold the left corner up at any angle, and then fold the right corner up so that the edges of the paper meet.
2. Clare thought that the angle at the bottom looked like a 90 degree angle. Does yours also look like it is 90 degrees?
3. Can you explain why the bottom angle *always has to be* 90 degrees? Hint: The third photo shows Clare's paper, unfolded. The crease marks are shown as dashed lines, and the line where the two paper edges met is shown as a solid line. Mark these on your own paper as well.

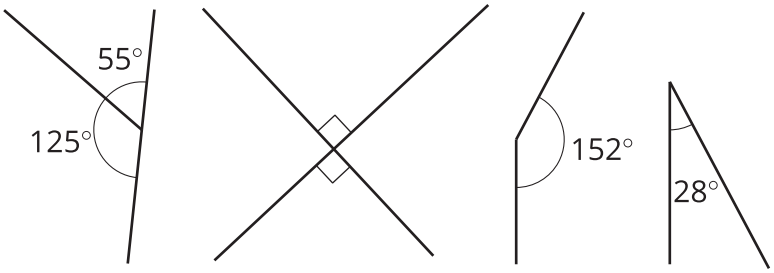
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Lesson 2 Summary

If two angle measures add up to 90°, then we say the angles are **complementary**. Here are three examples of pairs of complementary angles.



If two angle measures add up to 180°, then we say the angles are **supplementary**. Here are three examples of pairs of supplementary angles.



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