

Better Mathematics Through Literacy
Spring Quarter Follow-up Session
Measurement Station I – What’s Your Angle?

Materials Needed:

- Card Stock template for Circular Protractors (1 for each person)
- Scissors (four pairs per station)
- Angle Measurement Sheets

Using the scissors provided, cut out both circles from the cardstock. Also cut a slit in each circle on the darkened line.

Put the two circles together so that the lined (or shaded) face is downward and the numbers that form the protractors face upward. You should be able to turn both of the circles around their centers. We will have a model protractor provided for you.

Before you begin using your make-shift protractor, talk with your group for just a few moments about what makes an angle. Review some of the vocabulary with your group members:

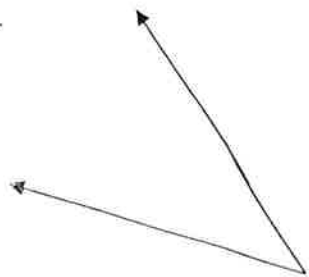
- Rays
- Angle Vertex
- Initial side of the angle
- Terminal side of the angle
- Right Angle
- Acute Angle
- Obtuse Angle
- Straight Angle
- “Benchmark Angles” (90° , 45° , 30° , 60° , 180° , 270° , 360°)

Use your new protractor tool to measure the angles that are on the accompanying sheet. Discuss your measurements with other members of your group. Classify the angles on the page as being acute, right, obtuse, or straight angles.

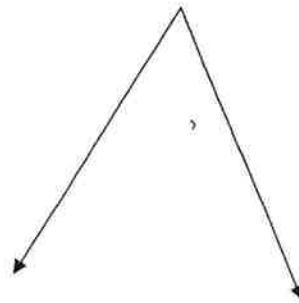
If time permits, after you measure each angle, turn the protractor over to notice the shaded side. Discuss with members of your group how you can relate angle measurement to fractions of a whole circle. In pairs, you can play, “Guess my angle” in which one person shows his or her partner an angle on the shaded side. The partner must then give his or her best estimate for the degree measure of picture and give a rationale for their choice.

Use the benchmark angles to determine the measure of each of these angles.

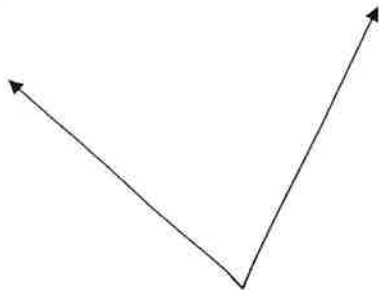
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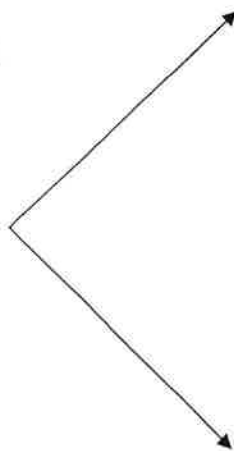
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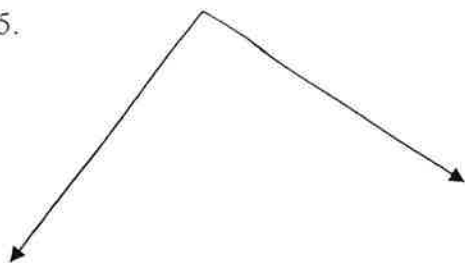
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