



MATH NEWS



Grade 4, Module 4, Topic B

4th Grade Math

Module 4: Angle Measure and Plane Figures

Math Parent Letter

This document is created to give parents and students a better understanding of the math concepts found in Eureka Math (© 2013 Common Core, Inc.) that is also posted as the Engage New York material which is taught in the classroom. Module 4 of Eureka Math (Engage New York) covers Angle Measure and Plane Figures. This newsletter will discuss Module 4, Topic B.

Topic B: Angle Measurement

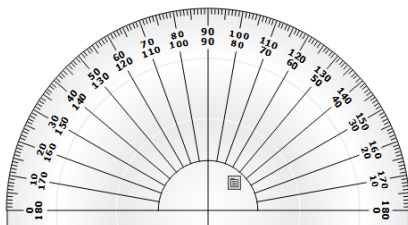
Words to know

- Protractor
- Degree

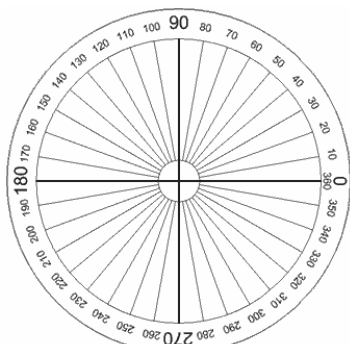
Protractor Types

Students will use two different types of protractors in class.

The Standard Protractor or Half Protractor



The Circular Protractor

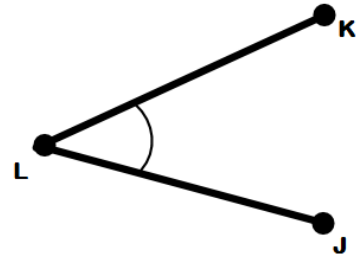


Focus Area – Topic B

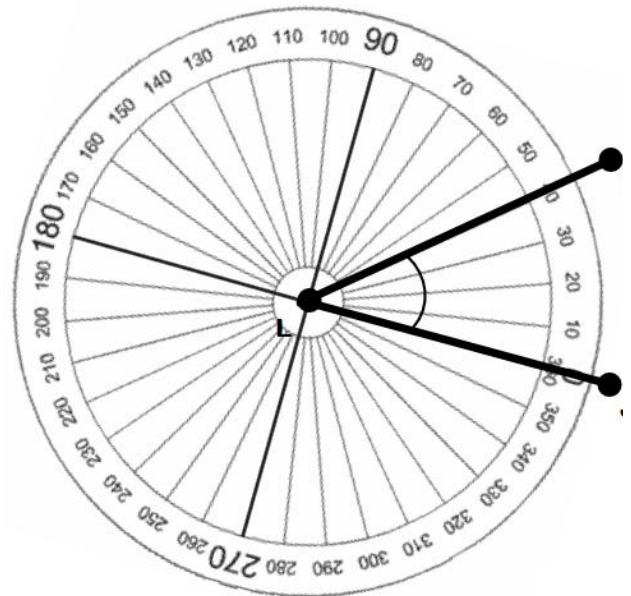
Angle Measurement

Example Problem and Answer

Students are asked to identify the measures of angles.



In this example, they will place the center point of the protractor over point L. Then match the 0° line of the protractor along line segment LJ. They can then read where line segment LK crosses the edge of the protractor to find the angle measurement.



The measure of this angle is 40°. The students will write angle KLJ is 40° or

$$\angle KLJ = 40^\circ$$



OBJECTIVE OF TOPIC B

- 1 Use protractors to measure and draw angles.
- 2 Sketch given angle measures and verify with a protractor.
- 3 Identify and measure angles as turns and recognize them in various contexts.

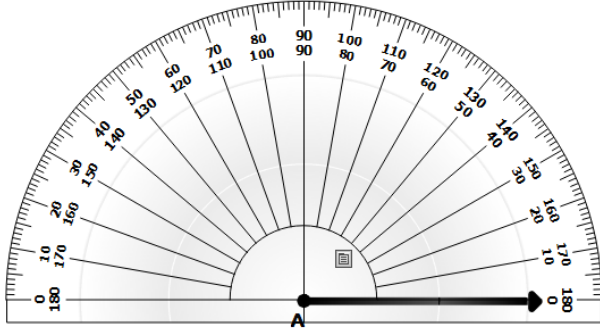
Using a Protractor to Draw Angles

Students are asked to draw angles that match a certain degree measure. These are steps for drawing a 70°

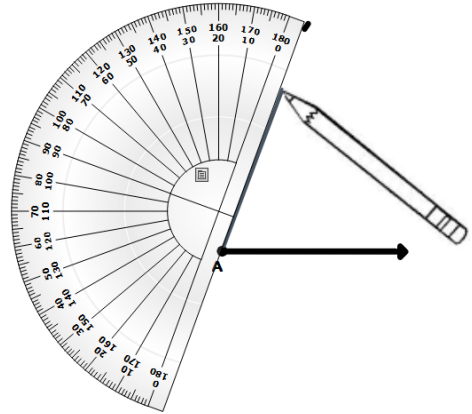
Step 1 - Draw a ray and label the endpoint A.



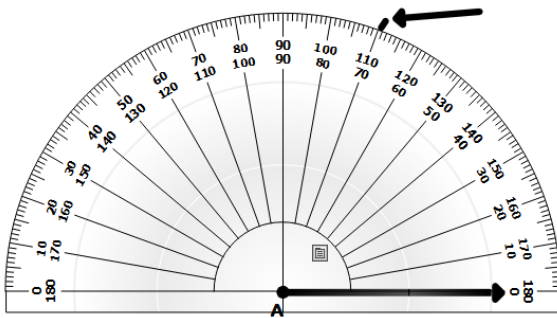
Step 2 - Line up the protractor, placing the center over endpoint A making sure the ray lines up with the 0° line.



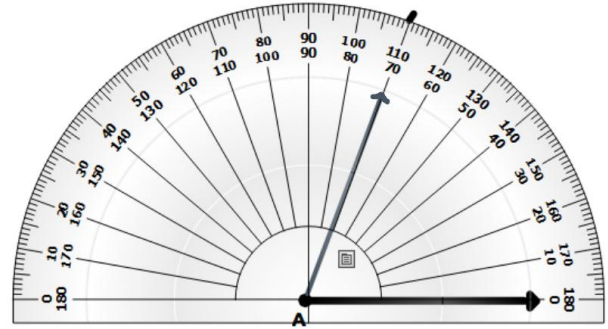
Step 4 - Use the straight edge of the protractor to draw the next ray beginning at point A and continuing to the mark you made above the 70° .



Step 3 - Find 70° on the protractor and draw a small point right above it.



Step 5 - Use the protractor to verify the angle is 70° .



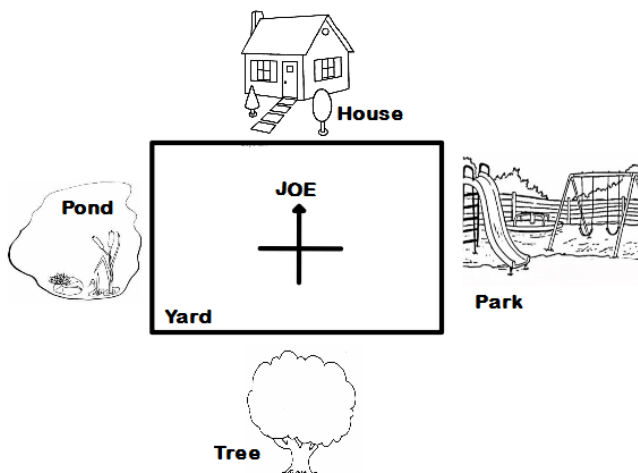
Angles as Turns

Students further explore angle measure as an amount of turning. They reason that a $\frac{1}{4}$ turn is a right angle and measures 90° , a $\frac{1}{2}$ turn measures 180° , and a $\frac{3}{4}$ turn measures 270° . They go on to identify these angles in their environment.

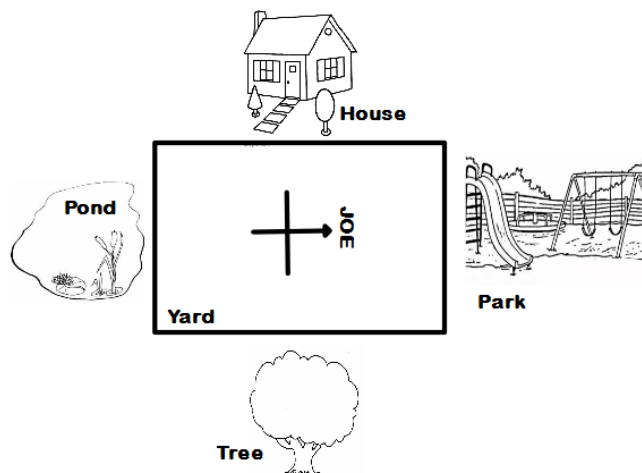
Example Question and Answer

Joe stood in the middle of the yard and faced the house. Joe turned 90° to the right. To what was Joe now facing?

Before



After



Answer: Joe would be facing the park.