Eureka Math

4th Grade
Module 4
Lesson 5

At the request of elementary teachers, a team of Bethel & Sumner educators met as a committee to create Eureka slideshow presentations. These presentations are not meant as a script, nor are they required to be used. Please customize as needed. Thank you to the many educators who contributed to this project!

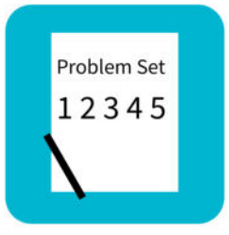
Directions for customizing presentations are available on the next slide.

Icons

Read, Draw, Write

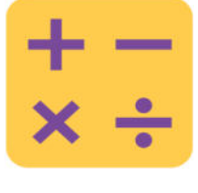
Learning Target

Personal White Board



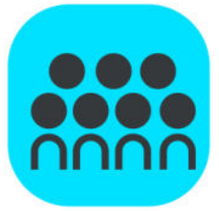
Problem Set

Manipulatives Needed



Fluency

Think Pair Share



Whole Class

Individual

Partner

Small Group

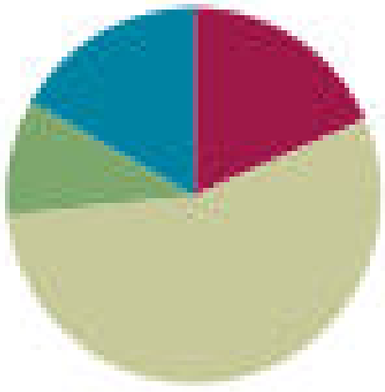
Small Group Time

Lesson 5

Objective: Use a circular protractor to understand a 1-degree angle as $\frac{1}{360}$ of a turn. Explore benchmark angles using the protractor.

Suggested Lesson Structure

Fluency Practice	(11 minutes)
Application Problem	(6 minutes)
Concept Development	(33 minutes)
Student Debrief	(10 minutes)
Total Time	**(60 minutes)**



I can use a circular protractor to understand a 1-degree angle as 1/360 of a turn. Explore benchmark angles using the protractor.

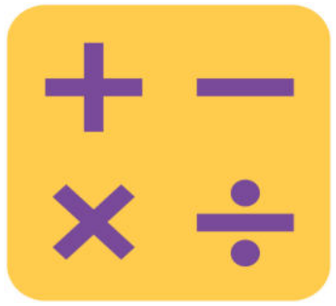
Divide Using the Standard Algorithm

48 ÷ 2

On your personal white boards, solve the division problem using the vertical method.

Identify Two-Dimensional Figures

Look on page 73 for directions



Physiometry

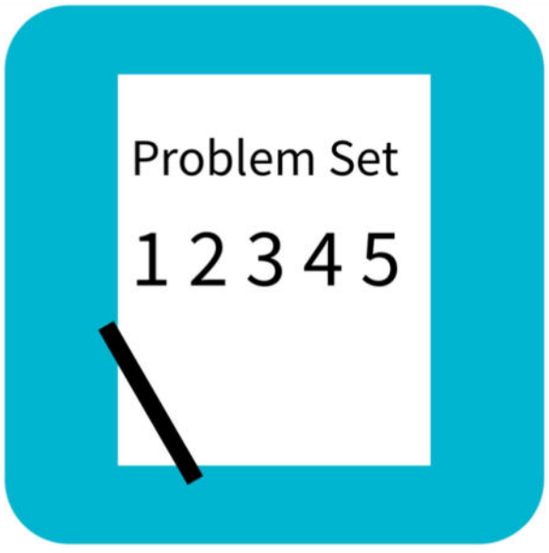
Look on page 74 for directions

Application Problem

- Place right angle templates on top of the circle to determine how many right angles can fit around the center point of the circle.
- If necessary, team up with other students to share templates. (Overlaps are not allowed.)
- How many right angles can fit?

Constructing a Paper Protractor

Look at pages 75-79 for instructions and discussion questions.



Problem Set

Name _____ Date _____

1. Make a list of the measures of the benchmark angles you drew, starting with Set A. Round each angle measure to the nearest 5°. Both sets have been started for you.

   a. Set A: 45°, 90°,

   b. Set B: 30°, 60°,

Debrief

Any combination of the questions below may be used to lead the discussion.

- When you listed the benchmark angles, did you notice any numerical patterns?
- You listed some measures of acute and obtuse angles. What would be some measurements of other acute angles? Obtuse angles?
- A full turn is 360°. What could you do to find the **degree measure of an angle** that takes 10 turns to make a whole turn?
- How did you respond to the final question?
- If you were to draw a tape diagram to represent one whole turn and the benchmark angles of Set A, what would you do? Set B?

Exit Ticket

Name _____ Date _____

1. How many right angles make a full turn?

2. What is the measurement of a right angle?

3. What fraction of a full turn is 1°?