Eureka Math

4th Grade
Module 4
Lesson 7

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

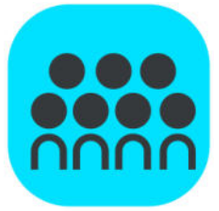
Personal White Board

Problem Set

Manipulatives Needed

Fluency

Think Pair Share



Whole Class

Individual

Partner

Small Group

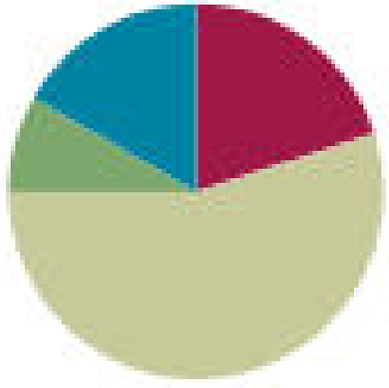
Small Group Time

Lesson 7

Objective: Measure and draw angles. Sketch given angle measures, and verify with a protractor.

Suggested Lesson Structure

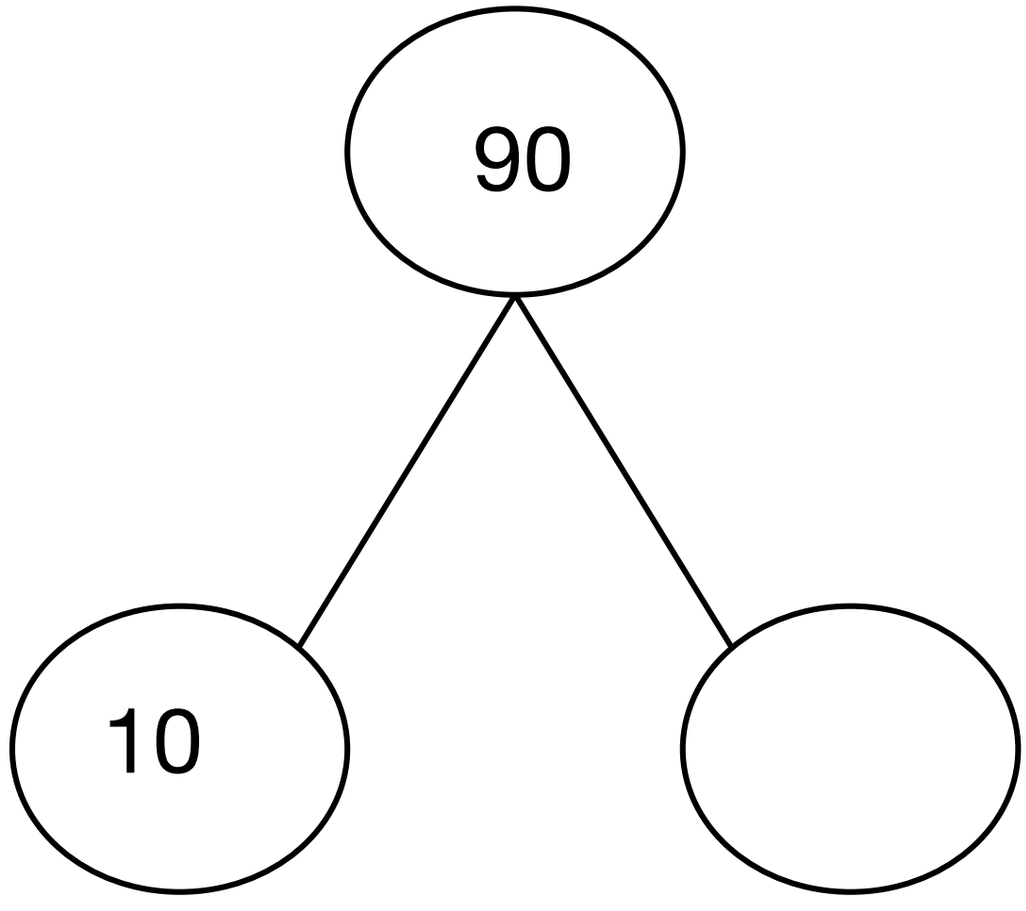
Fluency Practice	(12 minutes)
Application Problem	(5 minutes)
Concept Development	(33 minutes)
Student Debrief	(10 minutes)
Total Time	**(60 minutes)**



I can measure and draw angles. I can sketch given angle measures, and verify with a protractor.

Break Apart 90, 180, and 360

On your personal white boards, write the number bond, filling in the unknown part.



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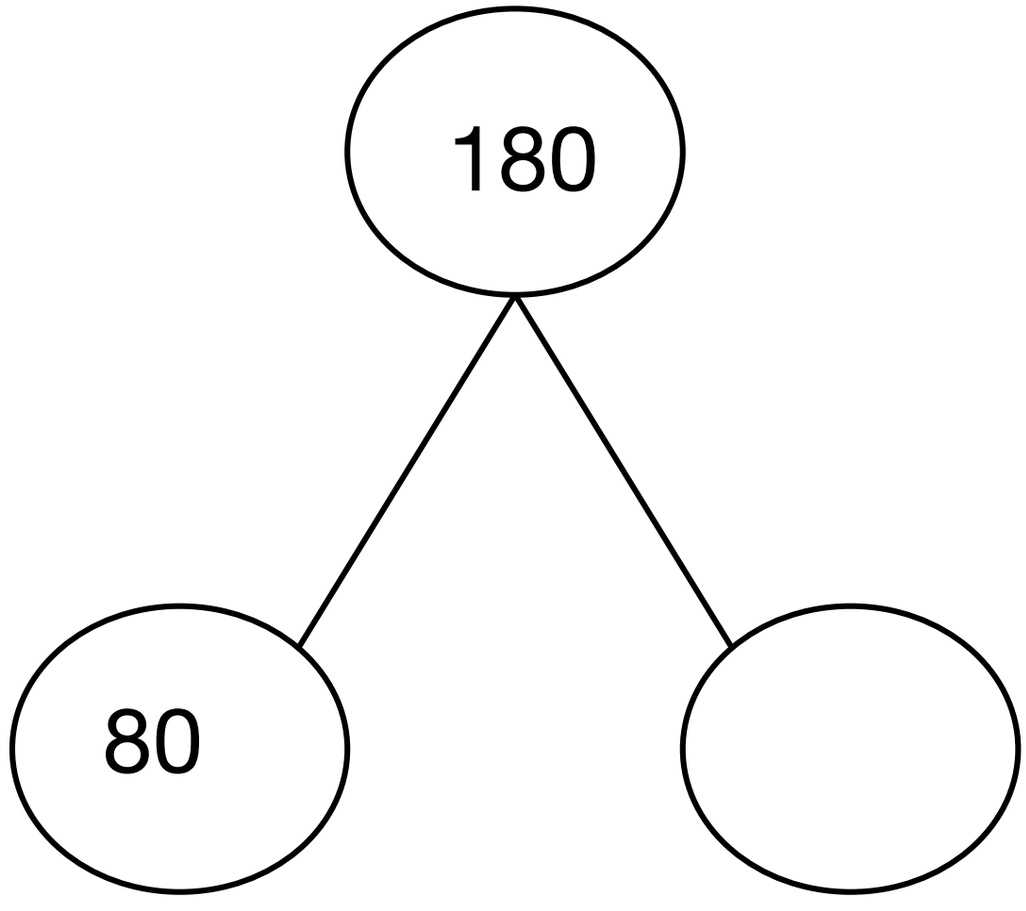

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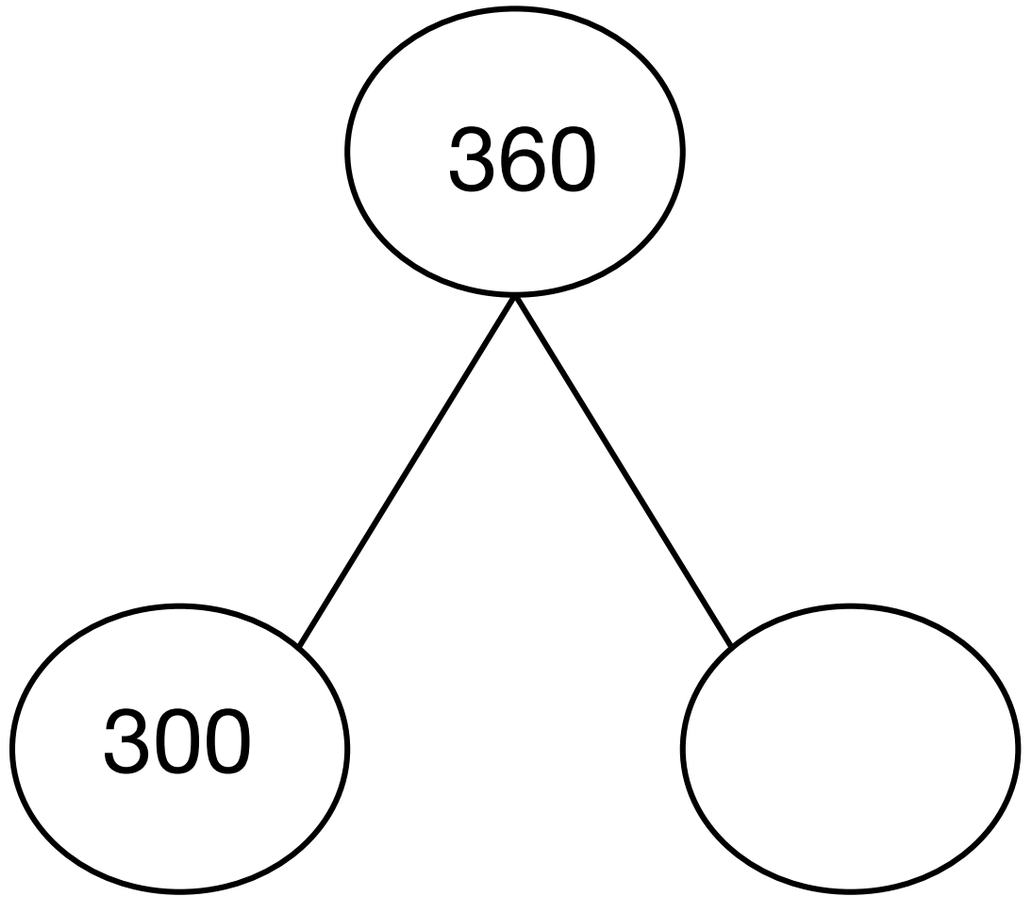
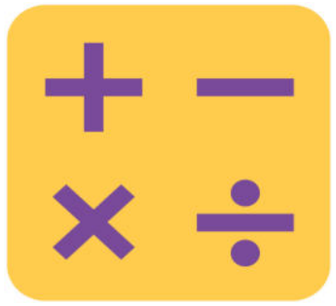


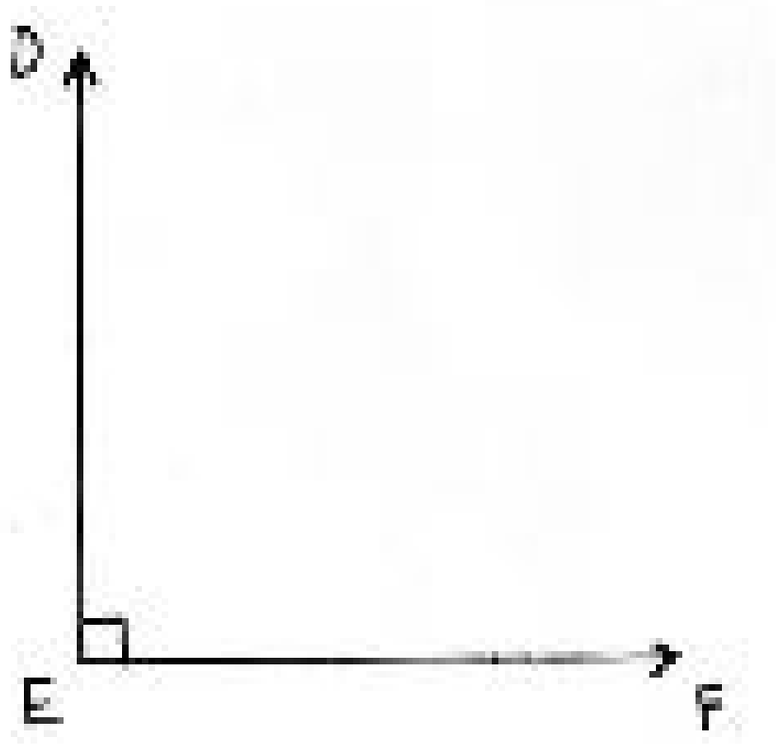


Physiometry

Look on page 105 for directions.

Identify Angle Measures

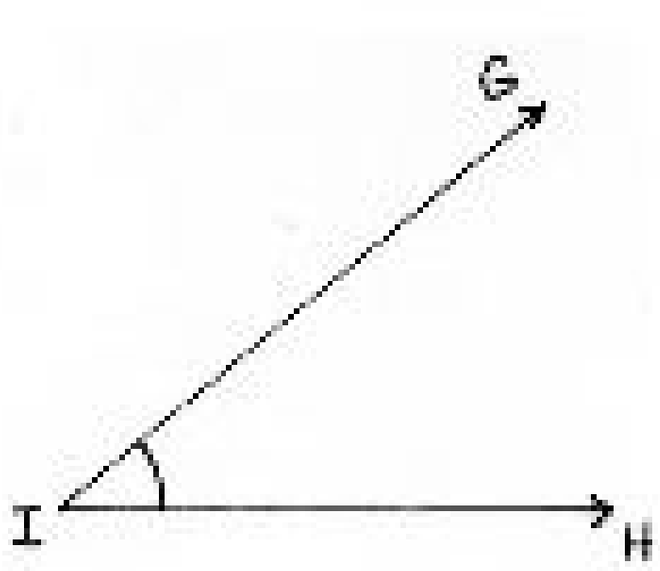
How many degrees are in a right angle?



Name the angle.
What type of angle is it?
How many degrees are in <DEF?

Identify Angle Measures

Name the angle.



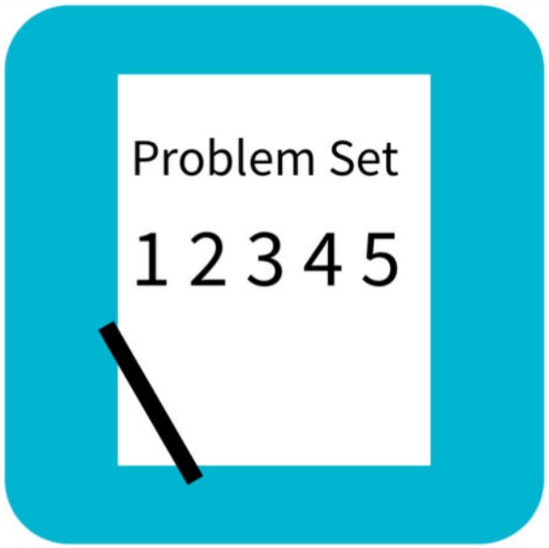
Estimate. Is the measure of <GIH 40 degrees or 140 degrees?
How do you know?

Application Problem

Predict the measure of ∠XYZ using your right angle template. Then, find the actual measure of ∠XYZ using a circular protractor and 180° protractor. Compare with your partner when you are finished.

Concept Development

Look at pages 107-110 for instructions and discussion questions.



Problem Set

Name _____ Date _____

Construct angles that measure the given number of degrees. For Problems 1–4, use the ray shown as one of the rays of the angle with its endpoint as the vertex of the angle. Draw an arc to indicate the angle that was measured.

1. 30°

2. 65°

Debrief

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

- In Problem 1, how did you draw the angles with a 180° protractor?
- In Problem 1, which were the most challenging angles to draw? Explain.
- Why is it important to be precise when drawing angles? Tell your partner how you can be precise when drawing angles.
- Why do we verify our sketches with a protractor?
- It is important to learn to use the 180° protractor because it is the one you will see everywhere. Explain to your partner how to measure an angle greater than 180° with a 180° protractor.

Exit Ticket

Name _____ Date _____

Construct angles that measure the given number of degrees. Draw an arc to indicate the angle that was measured.

1. 75°

2. 105°