



TEACHER PAGE
Lesson: Area of Sectors
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New AZ Math Strand 4 Geometry and Measurement **Grades 9-12**
Articulated **4MH4-PO6** Find the area of a sector of a circle.

Learning Objectives: The student will be able to:

- define a sector of a circle
- find the area of a sector of a circle
- recognize and identify examples of sectors in real life contexts

Overview:

The lesson begins with real life examples of sectors, like slices of pizza. It continues with the technique employed to find the area of a sector of a circle. Next comes practice problems for the student to solve followed by guided practice and an assessment section. The vocabulary list SAY WHAT? identifies all the key terms of this lesson for students.

Classroom Management:

The students can work on this lesson individually or in small groups. Also, the teacher may use this lesson as a demonstration of the concept of area of sectors, complete with relevant examples and a challenge here or there.

Engage students:

Ask students if they would rather have $\frac{1}{2}$ of a 14" pizza or $\frac{1}{3}$ of an 18" pizza. Discuss how they made their decisions and reveal that knowledge of measuring the area of sectors is needed in order to make the decision.

Follow-up, extensions:

Go to a newspaper or the internet and find examples of circle graphs depicting budgets or expenditures of a company. Compare and contrast your samples with those of your classmates. In SO WHAT! the question is asked: what makes some cones taller than others? (It depends on the size of the sector that is removed. DIG DEEPER introduces segments of sectors. TALK ABOUT IT! has you draw your own pie chart and compare it to a partner's.

Assessment:

The students will need to correctly answer the questions in the SHOW section of the lesson to demonstrate mastery of the objective. They will have to write the formula as well as be able to solve the problems.



