Algebra/Geometry Institute Summer 2002

Lesson Planning Guide

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School:Coahoma County Jr. High
Grade Level: 8th
Competency: 7a, 7b

1   Teaching objective(s)
   a.   To investigate Pi
   b.   To find circumference

2   Instructional Activities
   a. The teacher will have a volunteer read the book <u>Sir Cumference</u>
       <u>and the Dragon Pi</u> by Cindy Neuschwander as other students read
       from the transparency. She will tell students they will take on
       Radius' job in today's story, comparing the circumference to the
       diameter of circular objects to find *Pi*.
   b. The teacher will draw a circle on a transparency and have students
       to identify radius, diameter, chords, and center of a circle
   c. The students will work in groups of four using a tape measure and
       string to measure the diameter and circumference of circular
       objects. They will record these measures on their worksheet and
       find the ratio of the circumference to the diameter
   d. Given the ratio $\frac{c}{d} = \pi$ the teacher will use the overhead to
       demonstrate how to solve to find the circumference of a circle.
   e. Given two sets of two problems, the student will find the
       circumference of one set

     Set I   Set II
   1. r = 8cm   1. r = 6cm
   2. d= 11m   2. d= 9m
   f. The teacher will take up students' work and select four volunteers
       to solve the problems on the overhead

3   Materials and Resources
   a. Prentice Hall Pre-Algebra Book
   b. Sir Cumference and the Dragon of Pi Book by Cindy
      Neuschwander, Published by Charlesbridge Publishing,1999
   c. Merrill Pre-Algebra A Transition to Algebra
   d. Circular Objects
   e. Groups Worksheets
   f. Scissors, tape measures and strings

4   Assessment
   a. oral and written responses
   b. Two problems activity sheet

5   Enrichment (Optional)
   Students will be given a worksheet where they will have to find the
   diameter given the circumference