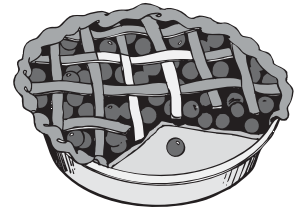


A Slice of Pi



An investigation on the ratio of circumference to diameter

The ancient thinkers discovered something rather curious about circles. This intriguing mystery of the natural world has to do with the relationship of "how far around" and "how far across." You are to investigate this pervasive pattern and use it to estimate the width of a tree and the circumference of a basketball hoop.

- Write the name of the designated objects in the chart below. For each of these objects, measure the circumference and the diameter and record them in the chart. For the designated tree, measure and record the circumference of the tree. A standard basketball hoop is 18" across.

Object							B-ball Hoop	Tree
Circumference								
Diameter								
Ratio: C/D								

- For each object, calculate and record the ratio of the circumference to the diameter.

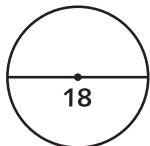
- Share your data with the class.
What is the pervasive pattern?

WHAT IS PI? _____

Object	Your Group's Ratios	Another Group's Ratios	Another Group's Ratios

- Use your class data to estimate the diameter of the tree and the circumference of the hoop. Show the work.

- Find the circumference of the following circles. Give both the exact and approximate values for your answers.
 -
 -
 - A circle with a radius of 10



- Find the diameter of the circle with the given circumference.
 - 36π
 - 50.26