

Name: _____

Lesson Guide

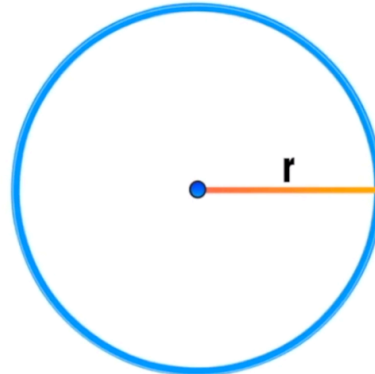
This lesson guide accompanies the following video lesson:

Arc Length and Sector Area of Circles

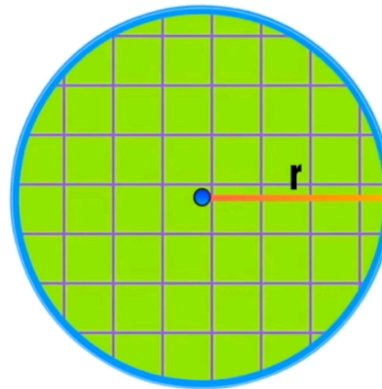


Quick Review

Circumference

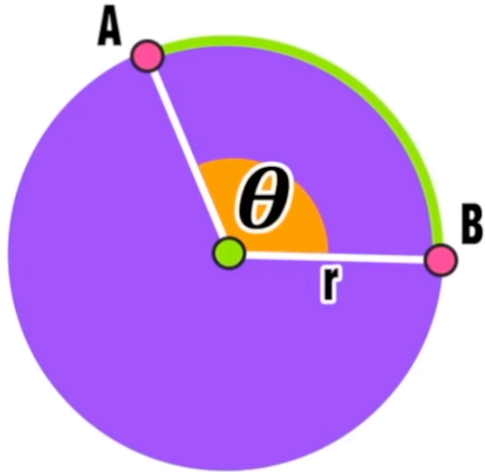


Area



In your own words, what is the key difference between the circumference and the area of a circle?

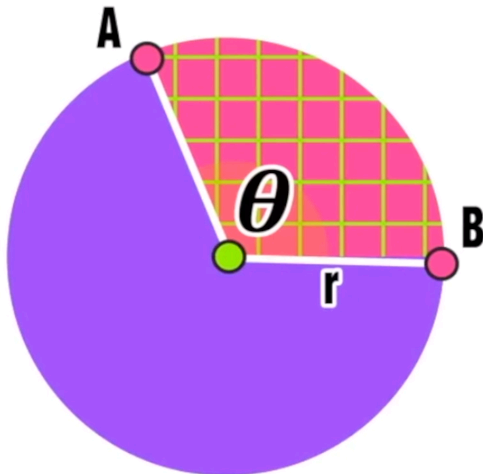
Arc Length



Length of \widehat{AB}
Arc Length

Arc length represents a portion of the circumference of a circle.

Sector Area

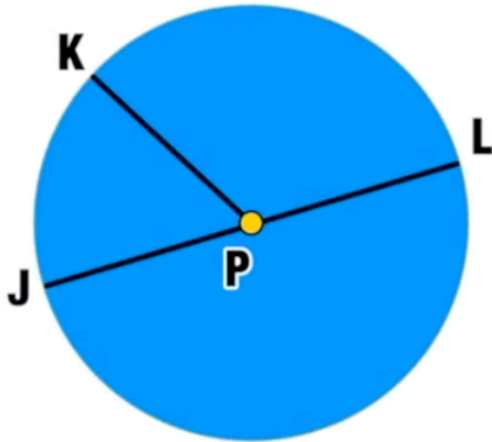


Area of a Sector
Sector Area

Sector area represents a portion of the area of a circle.

Practice Problem #1

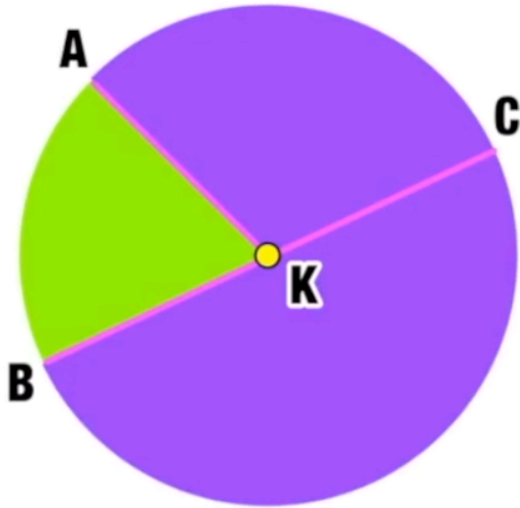
Observe circle P below. If $m\angle KPL$ is 120° and diameter \overline{JL} equals 24 cm, find the length of \widehat{KL} .



My Answer= _____

Practice Problem #2

Observe circle K below. If \overline{KC} is a radius with a length of 5cm and $m\angle AKC$ is 117° , find the area of the green shaded region.



My Answer= _____

ANSWER KEY

Practice Problem #1: 25.1 centimeters

Practice Problem #2: 4.4 square centimeters