Lesson 8: Arcs and Chords

Classwork

Opening Exercise

Given circle with , , and . Find and . Explain your work.

Exercises

1. Given circle with and , find . Explain your work.
2. If two arcs in a circle have the same measure, what can you say about the quadrilateral formed by the four endpoints? Explain.
3. Find the angle measure of and .
4.  and . Find
5.  is a diameter of circle . . Find

Lesson Summary

Theorems:

* Congruent chords have congruent arcs.
* Congruent arcs have congruent chords.
* Arcs between parallel chords are congruent.

Problem Set



1. Find
	1.
	2.
	3.
2. In circle , is a diameter, , and .
	1. Find .
	2. Find .
3. In circle , is a diameter, 2, and . Find .

******

1. In circle , is a diameter and .
	1. Find .
	2. Find .
	3. Find



1. In the circle given, . Prove .
2. Given circle with , show .
3. In circle , is a radius and and . Find . Complete the proof.

** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_