## **Chapter 10 Mid-Chapter Test**

9/10 90% SCORE \_

(Lessons 10-1 through 10-4)

Part I Write the letter for the correct answer in the blank at the right of each question.

1. What is the name of the longest chord in a circle?

A diameter

**B** radius

C secant

D tangent

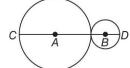
**2.** The radius of  $\bigcirc B$  is 4 centimeters and the circumference of  $\bigcirc A$  is  $20\pi$  centimeters. Find CD.

**F** 10 cm

H 24 cm

**G** 14 cm

**J** 28 cm



- **3.** A chord of  $\bigcirc P$  measures 8 inches and the distance from the center to the chord is 3 inches. Find the radius of  $\bigcirc P$ .

**A** 3 in.

**B** 5 in.

 $\mathbb{C}\sqrt{73}$  in.

**D** 10 in.



**4.** If  $m \angle MON = 86$ , find  $m \angle MPN$ .

F 86

G 45

**H** 43 **J** 30



Н

**5.** Find x if  $m \angle 1 = 2x + 10$  and  $m \angle 2 = 3x - 6$ .

**A** 4

**B** 16

**C** 24 **D** 42



В

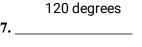
## Part II

**6.**  $\overline{AE}$  is a diameter of  $\bigcirc G$  and  $m \angle BGE = 136$ . Find  $m\widehat{AB}$ .

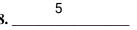


44 degrees

7. A circle with a radius of 12 inches has an arc that measures  $8\pi$  inches. Find the measure of the central angle determined by this arc.



**8.** In  $\bigcirc P$ , chord  $\overline{AB}$  measures 4x - 6 centimeters and chord  $\overline{CD}$  measures 6x - 12centimeters. If  $\overline{AB}$  and  $\overline{CD}$  are each 4 centimeters from P, find AP.



9. A 15-inch by 8-inch tablecloth is placed on a circular table. Each of the four corners of the tablecloth touch the edge of the table. Determine the radius of the table.

93 degrees?

8.5in

**10.** Quadrilateral *ABCD* is inscribed in  $\bigcirc$  *P*. Find  $m \angle ABC$ .



87 degrees