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STUDY GUIDE

FOLDABLES™

Use your Chapter 11 Foldable to help you study for your chapter test.

VOCABULARY PUZZLEMAKER

To make a crossword puzzle, word search, or jumble puzzle of the vocabulary words in Chapter 11, go to:

www.glencoe.com/sec/math/t_resources/free/index.php

BUILD YOUR VOCABULARY

You can use your completed Vocabulary Builder (pages 208–209) to help you solve the puzzle.

11-1

Parts of a Circle

Underline the term that best completes the statement.

1. A chord that contains the center of the circle is the diameter [radius].
2. A chord [radius] is a segment with endpoints of the circle.
3. Two circles are [circumscribed] concentric if they lie on the same plane, have the same center, and have radii of different lengths.



11-2

Arcs and Central Angles

In circle C , \overline{BD} is a diameter and $m\angle GCF = 63$. Find each measure.

4. $m\widehat{FG}$

63

5. $m\widehat{AD}$

117

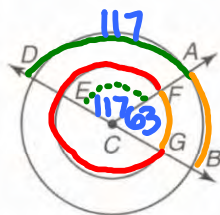
6. $m\widehat{AB}$

63

7. $m\widehat{GEF}$

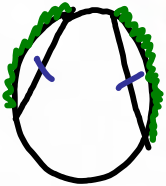
297

$\frac{360}{-63}$



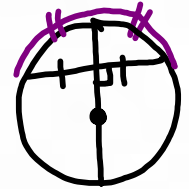
11-3

Arcs and Chords



Complete each statement.

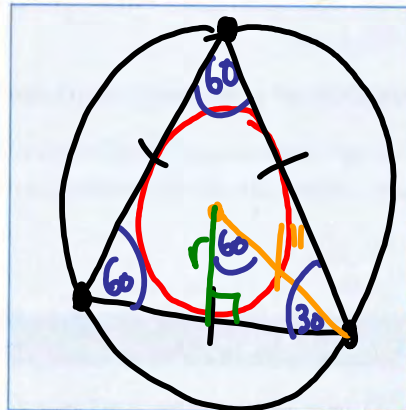
8. If two chords are congruent in the same circle, the intercepted arcs are also congruent.
9. When the diameter of the circle bisects a chord of the circle, then it is perpendicular to the chord and bisects the corresponding arc.
10. In a circle, if two arcs are Congruent, their chords are congruent. #8 backwards.



11-4

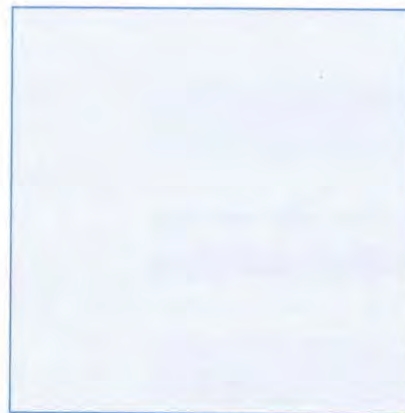
Inscribed Polygons

11. Construct an equilateral triangle inscribed in a circle with radius 1 inch.



12. Draw a circle inscribed in the triangle from the previous problem. Which segment of the triangle equals the radius of the inscribed circle?

apothem



13. What is the approximate length of the segment in Exercise 12?

1/2"

11-5

Circumference of a Circle

Find the circumference of each circle.

$C = 2\pi r$ or $C = \pi d$

14. $r = \frac{1}{2}$ yd

~~$2\pi \cdot (\frac{1}{2}) = \pi \approx 3.14$ yd.~~

15. $d = 4.2$ in.

$\pi d = \pi \cdot (4.2) \approx 13.2$ in.

Find the radius of the circle whose circumference is given.

16. 47 ft

~~$2\pi r = C$~~
 $\frac{C}{2\pi} = r$
 $\frac{47}{2\pi} \approx 7.5$ ft

$47 \div [2 \times \pi] =$

17. 22.7 in.

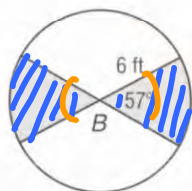
≈ 3.6 in

11-6

Area of a Circle

Underline the term that best completes the statement.

- 18. A region of a circle bounded by a central angle and its corresponding arc is a(n) sector.
- 19. The segment with endpoints at the center and on the circle is a radius.
- 20. Find the area of the shaded region in circle B to the nearest hundredth.



35.8 ft^2

$\frac{N}{360} \cdot \pi r^2 = \frac{114}{360} \pi (6)^2$
 (Note: 114 is derived from $2(57)$)



Visit geomconcepts.com to access your textbook, more examples, self-check quizzes, and practice tests to help you study the concepts in Chapter 11.

ARE YOU READY FOR THE CHAPTER TEST?

Check the one that applies. Suggestions to help you study are given with each item.

I completed the review of all or most lessons without using my notes or asking for help.

- You are probably ready for the Chapter Test.
- You may want to take the Chapter 11 Practice Test on page 491 of your textbook as a final check.

I used my Foldable or Study Notebook to complete the review of all or most lessons.

- You should complete the Chapter 11 Study Guide and Review on pages 488–490 of your textbook.
- If you are unsure of any concepts or skills, refer back to the specific lesson(s).
- You may also want to take the Chapter 11 Practice Test on page 491.

I asked for help from someone else to complete the review of all or most lessons.

- You should review the examples and concepts in your Study Notebook and Chapter 11 Foldable.
- Then complete the Chapter 11 Study Guide and Review on pages 488–490 of your textbook.
- If you are unsure of any concepts or skills, refer back to the specific lesson(s).
- You may also want to take the Chapter 11 Practice Test on page 491.

Student Signature	Parent/Guardian Signature
Teacher Signature	