Name: $\qquad$
Period: $\qquad$
Chapter 10 Test Review Questions
Find the area of each figure. Leave your answer in simplest radical form.
1.

2.


4.


Find the area of each regular polygon. Round your answer to the nearest tenth.
5.

6.

7.


Use the pair of similar figures at the right for Exercises 8 and 9.
8. What is the ratio of the perimeters and the ratio of the areas of the smaller figure to the larger figure?
9. If the area of the larger rectangle is 36 cm 2 , what is the area of
 the smaller rectangle?

## Do you UNDERSTAND?

10. Error Analysis A classmate calculated the area of the parallelogram at the right as $48 \mathrm{ft}^{2}$. Explain your classmate's error. What is the correct area?

11. What is the measure of the central angle of a 12-gon? Can you use special triangles to find the area of a 12 -gon if you know the side length? Explain.

## Find the area of each figure below.

12. 


14.
15.

13.

16.

17.

18. The figures at the right are similar. What are the ratio of the perimeters and the ratio of the areas?

19. The areas of two similar octagons are $72 \mathrm{in.}^{2}$ and $128 \mathrm{in} .^{2}$. Find their scale factor.
20. An equilateral triangle has a perimeter of 48 cm . What is its area?

## Do you UNDERSTAND?

21. Error Analysis To find the area of the regular hexagon at the right, a classmate uses the value 12 for the perimeter. What is your classmate's error?

22. Find the area of the polygon to the nearest tenth.

23. Name two minor arcs.
24. Name one semicircle.

25. What is the area of a circle with a diameter of 20 in.? Leave your answer in terms of $\pi$.
26. Find the length of the darkened arc in the figure at the right. Leave your answer in terms of $\pi$.

27. Find the area of the shaded region to the nearest hundredth.


Find the area of each regular polygon. Round your answer to the nearest tenth.
29.

30.

31


Use $\odot \boldsymbol{A}$ at the right to answer Exercises 4-7. Use 3.14 as an approximation for $\pi$.
32. What is the name of a major arc?
33. What is $m \overline{B C}$ ?
34. What is the circumference of $\odot A$ ?
35. What is the length of $\bar{C} \bar{E} \bar{D}$ ?

36. What is the area of a circle with a circumference of $18 \pi$ in.?

Leave your answer in terms of $\pi$.
37. What is the area of the shaded region of the circle? Leave your answer in terms of $\pi$.


