

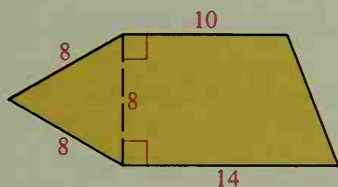
Chapter Test

Find the area of each figure described.

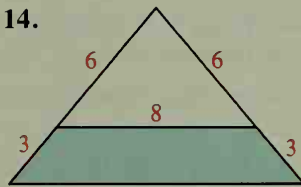
1. A circle with diameter 10
2. A square with diagonal 4 cm
3. An isosceles right triangle with hypotenuse $6\sqrt{2}$
4. A circle with circumference 30π m
5. A rhombus with diagonals 5 and 4
6. An isosceles trapezoid with legs 10 and bases 6 and 22
7. A parallelogram with sides 6 and 10 that form a 30° angle
8. A regular hexagon with apothem $2\sqrt{3}$ cm
9. Sector AOB of $\odot O$ with radius 4 and $m\widehat{AB} = 45$
10. A rectangle with length 12 inscribed in a circle with radius 7.5
11. A sector of a circle with radius 12 and arc length 10π
12. A square with radius 9

Find the area of each shaded region.

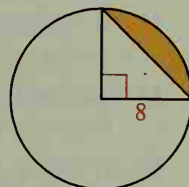
13.



14.



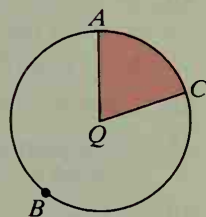
15.



16. The areas of two circles are 100π and 36π . Find the ratio of their radii and the ratio of their circumferences.

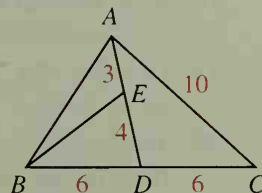
17. Two regular pentagons have sides of 14 m and 3.5 m, respectively. Find their scale factor and the ratio of their areas.

18. In the diagram of $\odot Q$, $m\widehat{ABC} = 288$ and $QA = 10$.
- a. Find the circumference of $\odot Q$.
 - b. Find the length of \widehat{AC} .
 - c. Find the area of sector AQC .



Ex. 18

19. A point is randomly chosen on \overline{AD} . Find the probability that the point is on \overline{AE} .
20. A point is randomly chosen inside $\triangle ABC$. What is the probability that the point is inside:
- a. $\triangle ABD$?
 - b. $\triangle BDE$?



Exs. 19, 20