

Name _____ Date _____ Period _____

DIRECTIONS: Place your answers in the given blanks. Show work. Remember to label your answers with correct units of measure when necessary! Leave answers in exact terms (using radicals, if necessary).

Reference Information

$A = \pi r^2$
 $C = 2\pi r$

$A = \ell w$

$A = \frac{1}{2}bh$

$V = \ell wh$

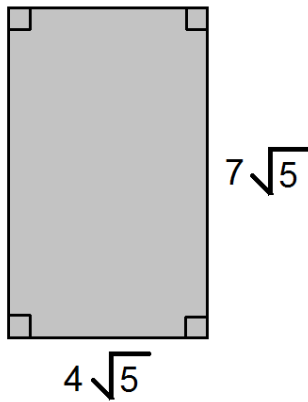
$V = \pi r^2 h$

$c^2 = a^2 + b^2$

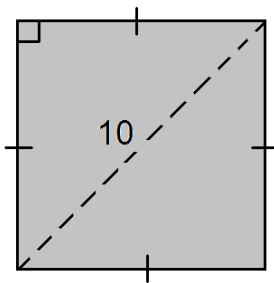
Special Right Triangles
 30°-60°-90°: sides $x, \sqrt{3}x, 2x$
 45°-45°-90°: sides $s, s, \sqrt{2}s$

The number of degrees of arc in a circle is 360.
 The measure in degrees of a straight angle is 180.
 The sum of the measures in degrees of the angles of a triangle is 180.

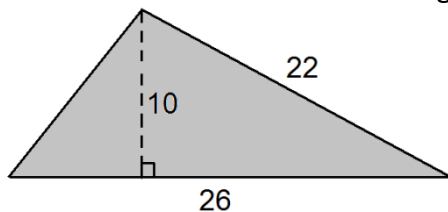
1. What is the area of the shaded region of the diagram? _____



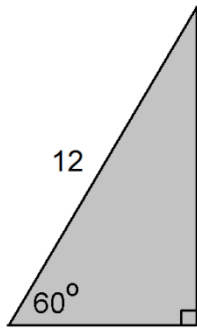
2. What is the area of the shaded region of the diagram? _____



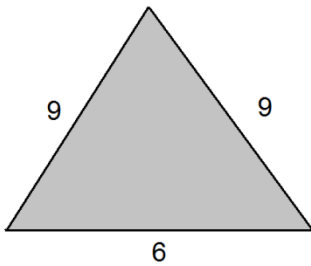
3. What is the area of the shaded region of the diagram? _____



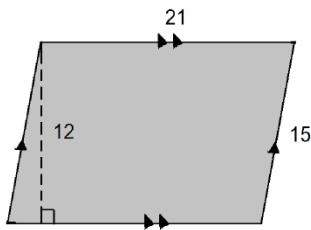
4. What is the area of the shaded region of the diagram? _____



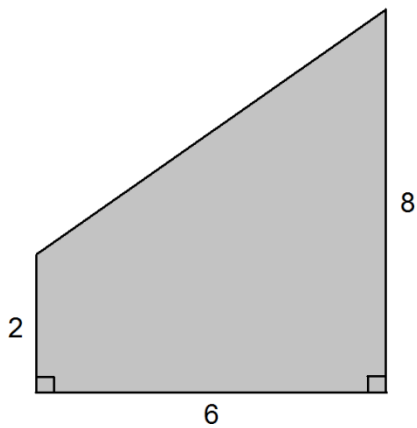
5. What is the area of the shaded region of the diagram? _____



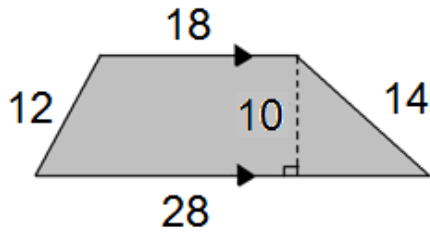
6. What is the area of the shaded region of the diagram? _____



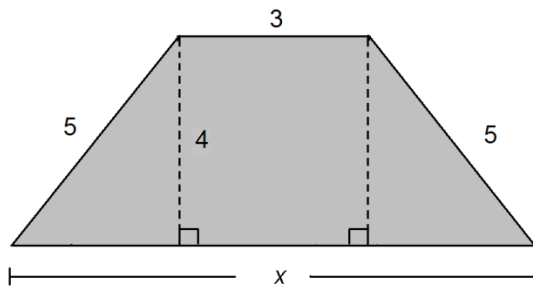
7. What is the area of the shaded region of the diagram? _____



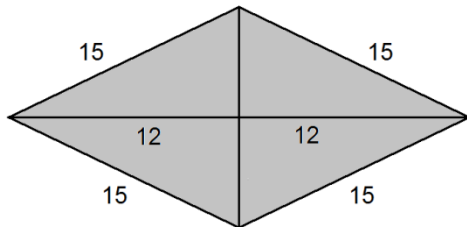
8. What is the area of the shaded region of the diagram? _____



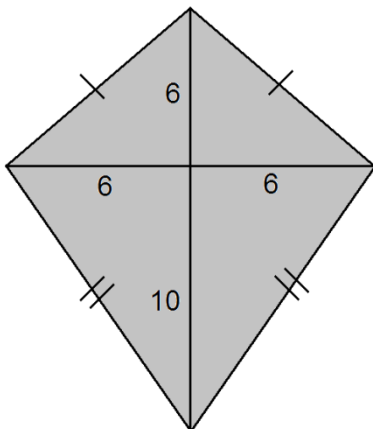
9. What is x ? _____
 What is the area of the shaded region of the diagram? _____



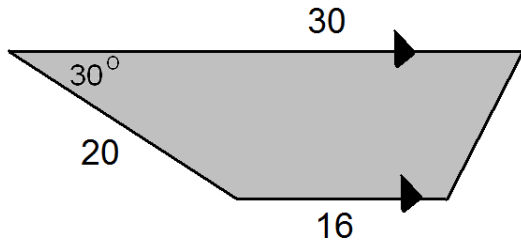
10. What is the area of the shaded region of the diagram? _____



11. What is the area of the shaded region of the diagram? _____



12. What is the area of the shaded region of the diagram? _____

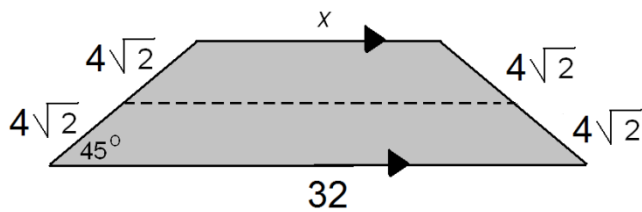


13. What is the median? _____

What is the height? _____

What is x ? _____

What is the area of the shaded region of the diagram? _____

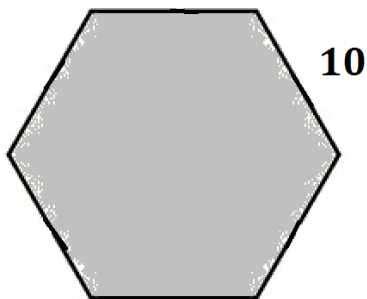


14. The following diagram is a regular hexagon with a side of 10.

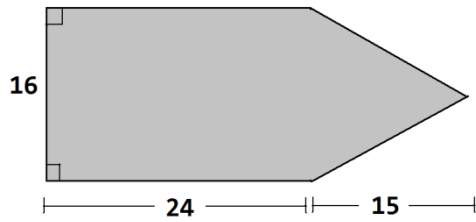
What is the radius? _____

What is the apothem? _____

What is the area of the shaded region of the diagram? _____



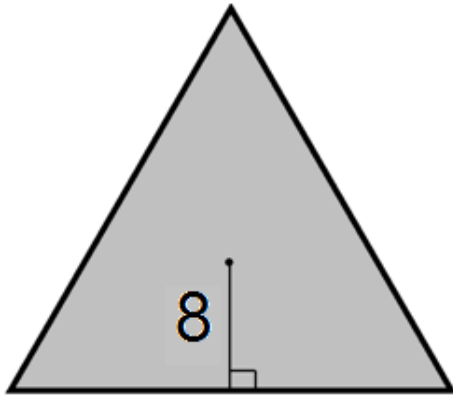
15. Find the area of the shaded region of the diagram. _____



16. The following diagram is an equilateral triangle with apothem of 8.

What is the radius? _____

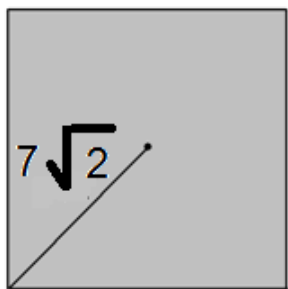
What is the area of the shaded region of the diagram? _____



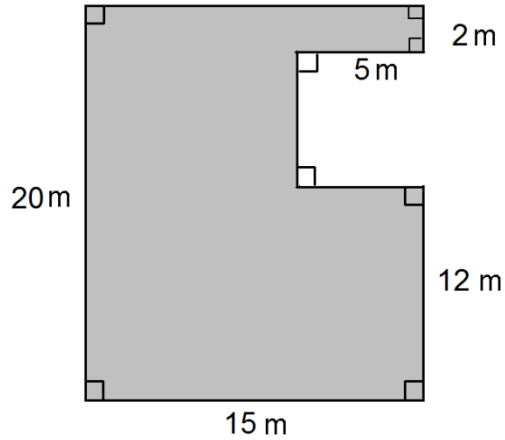
17. The following diagram is square with radius of $7\sqrt{2}$.

What is the apothem? _____

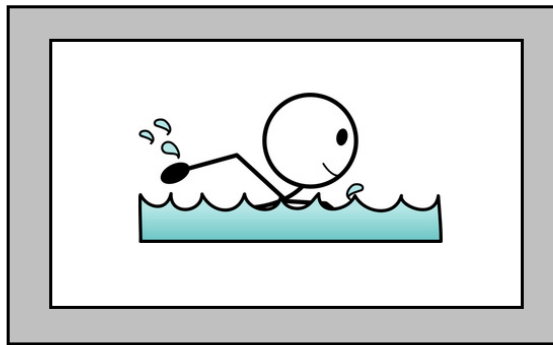
What is the area of the shaded region of the diagram? _____



18. Shantil’s driveway is shown in the following diagram. She is going to pay \$21 per square meter to have the driveway covered in asphalt. How much will Shantil have to pay for the asphalt?



19. A 30 ft x 18 ft swimming pool is surrounded by a 2 ft wide concrete sidewalk. What is the area of the sidewalk?



20. The length of a rectangle is 3 cm less than three times the width. The perimeter of the rectangle is 106 cm. What is the area of the rectangle?
