

SHOW WORK. GIVE EXACT ANSWERS IN SIMPLEST FORM. No decimals. Draw figures as necessary.

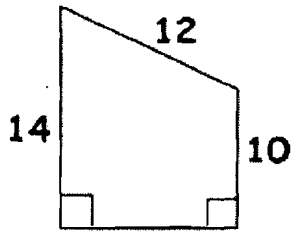
1. Find the area of an isosceles triangle with legs 15 cm and base 18 cm.

2. Find the area of a rhombus with diagonals 18 and 24.

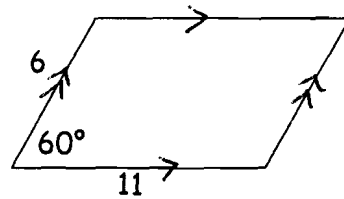
3. Find the area of a square with diagonal 10 inches.

4. Find the area of a rectangle with length 8 and diagonal 12.

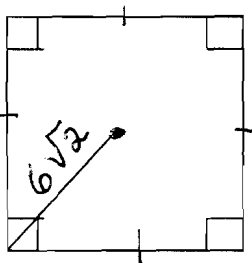
5. Find the area.



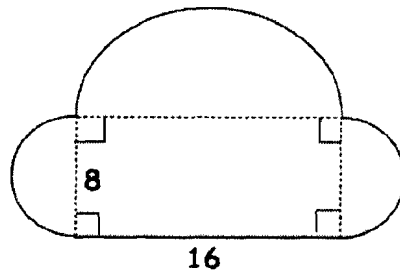
6. Find the area.



7. Find the area.

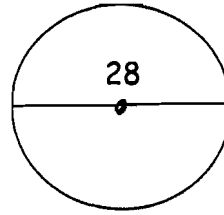


8. Find the area.

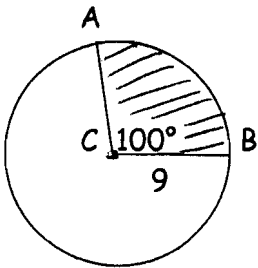


9. A regular hexagon has perimeter 60 inches. Find apothem, radius, and area.

10. Find circumference and area. Use $\pi \approx \frac{22}{7}$.

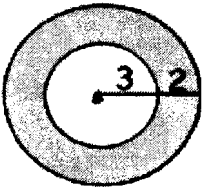


11. Find the length of arc AB and the area of the shaded sector.

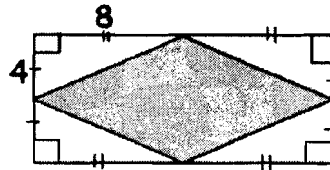


12. The area of a trapezoid is 70 ft^2 . Its height is 7 ft, and one base measures 13 ft. Find the other base and the median.

13. Find the area of the shaded ring.



14. Find the area of the unshaded region.



15. The bases of two similar triangles are in a ratio of 4:3.

a) What is the ratio of their perimeters?

b) What is the ratio of their areas?

16. The areas of two circles are 25π and 100π . Find the ratio of their diameters.