

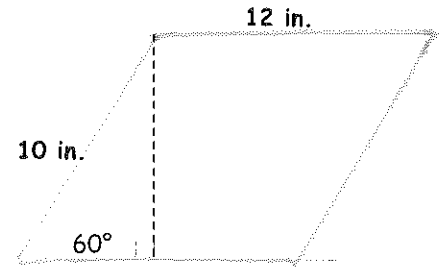
11.1-11.4 PRACTICE PROBLEMS

Name _____

1. Find the perimeter and area of the parallelogram. Show all work.

EXACT Perimeter = _____

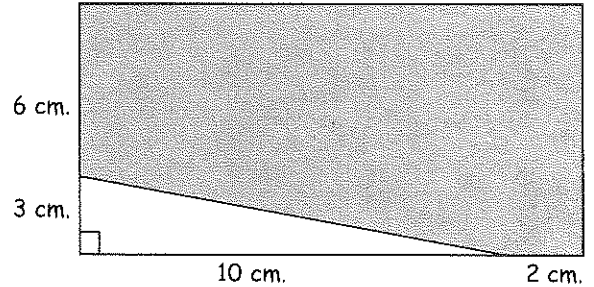
EXACT Area = _____



2. Find the perimeter and area of the shaded region. Show all work.

EXACT Perimeter = _____

EXACT Area = _____

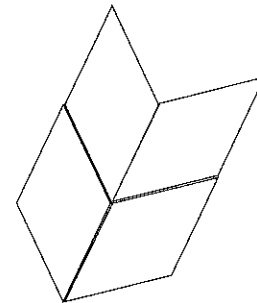


3. The arrowhead shown is made up of congruent rhombi as shown in the picture below. If the measure of one side of one rhombi is 3 cm, and the measure of the shorter diagonal is 2 cm, find the following values. Show all work. Round your answer to the nearest tenth if necessary.

Length of the longer diagonal = _____

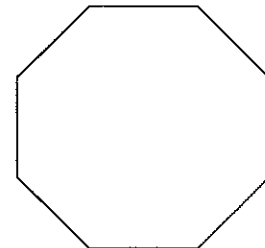
Area of each rhombus = _____

Total area of the arrowhead = _____

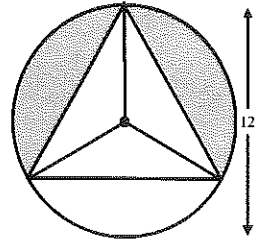


4. Rob had a 10 ft by 12 ft wall painted. For a wall twice as wide, the painter charged him twice as much. Is this reasonable? EXPLAIN.

5. Find the area of a regular octagon with a perimeter of 80 inches. Round to the nearest tenth. Label the diagram. Show your work, including all formulas.



6. Find the area of the shaded region. Assume the inscribed polygon is regular.

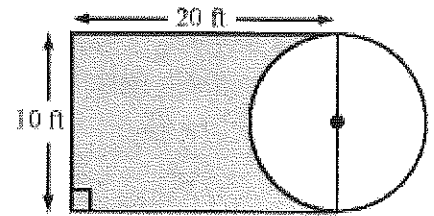


EXACT Area of the Shaded Region = _____

7. A square has an area of 49 square centimeters. If the area is quadrupled, what happens to the side length?

8. One side of a rectangle is the diameter of a circle. The length of the rectangle is 20 feet. The width of the rectangle is 10 feet. Find the perimeter of the figure and the area of the shaded region.

EXACT Area of the Shaded Region = _____

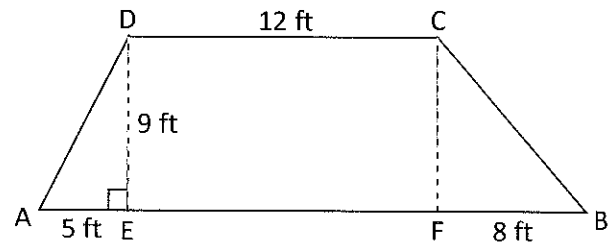


EXACT Perimeter = _____

9. Find the area and the perimeter of trapezoid $ABCD$. Show all work. Round your answer to the nearest tenth if necessary.

Area = _____

Perimeter = _____

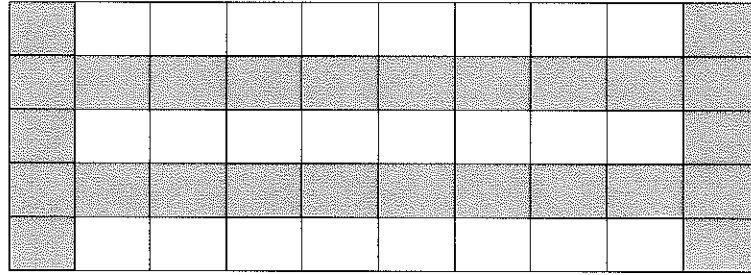


10. Find the equation of each circle described:

a) Its center is at $(-2,9)$ and its radius is $5\sqrt{3}$.

b) The endpoints of its diameter are $(-3,6)$ and $(1,-2)$.

11. Find the probability that a point chosen at random lies in the shaded region.

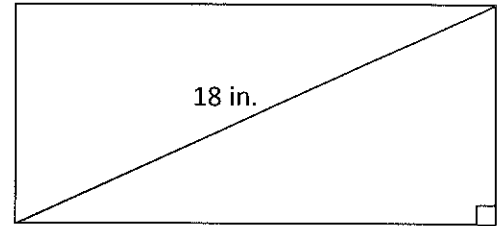


Probability = _____

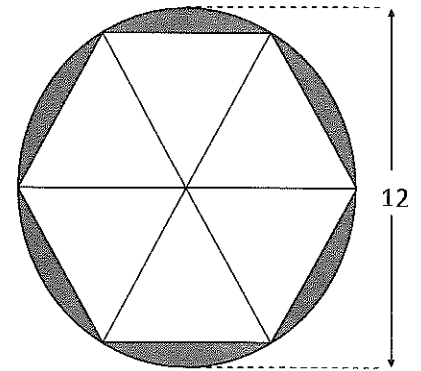
12. The diagonal of the rectangle below divides the right angles into a 60° angle and a 30° angle. The diagonal has a length of 18 in. Find the area and the perimeter of the rectangle.

EXACT Perimeter = _____

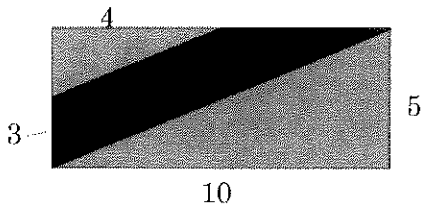
EXACT Area = _____



13. Find the Probability that a dart thrown at random at the Circular target would hit the shaded area.



14.



FIND THE PROBABILITY THAT A DART THROWN AT RANDOM AT THE RECTANGLE WOULD HIT THE SHADED AREA.

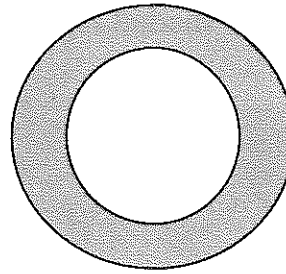
15.

Find the Area of the shaded region

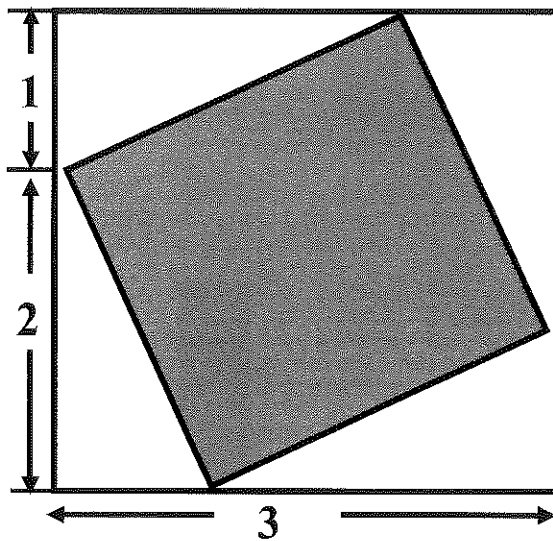


16.

This figure consists of 2 concentric circles.
 If the shaded area is 64π sq. in.
 and the smaller circle has a
 radius of 6 in., what is the
 radius, in inches of the
 larger circle?

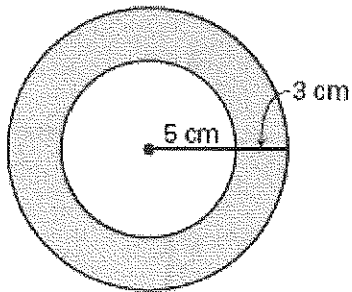


17.

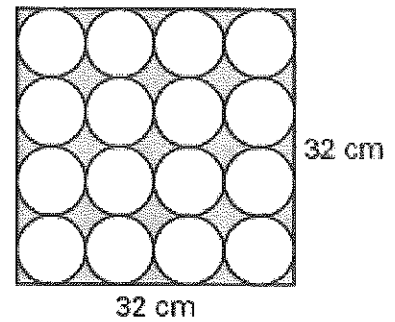


The shaded square
 is inscribed in the
 larger square

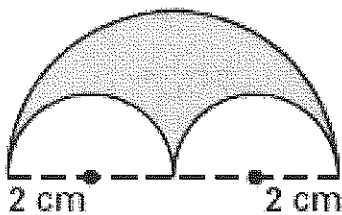
18.



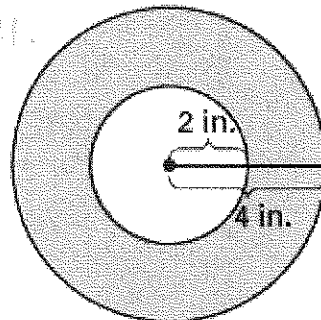
19.



20.



21.



22.

