A. Perimeter and Area (Continued)

Give the formula for the **Perimeter** (or Circumference) of any circle:

\[ P = 2\pi r \]

Give the formula for the **Area** of any circle:

\[ A = \pi r^2 \]

To determine the area of Odd Shapes/Shaded Regions: Add or subtract the areas of the “parts”

Use these formulas to determine the circumference and area of the following circles:

1. ![Circle with 6 in radius]
2. ![Circle with 8 cm radius]
3. ![Circle with 5 m radius]

Use these formulas to determine the AREA only of the following shapes/shaded regions.

4. ![Shaded region with 4 cm radius and 6 cm slant length]
5. ![Half-circle with 4 ft radius]
6. ![Rectangle with 8 in and 10 in dimensions]

7. Application: Given that the dimensions of a room are 10 feet by 12 feet, and the cost of the carpet is $22.50 per square yard, determine the cost of the carpet required to cover the floor.
B. Surface Area of three dimensional shapes:

Rectangular solids have 6 surfaces, each in the shape of a rectangle. To determine the surface area of the solid, determine the area of each rectangular surface, then add the six areas.

Note: Since the top and bottom are the same, the front and back are the same, and the ends are the same, we actually determine the area of three surfaces (top, front and one end), then double each amount before adding.

Determine the surface area of the following rectangular solids.

8. 

Surface area in square inches:

Surface area in square feet:

HW: Section 9.3 Problems 21, 22, 25, 26, 38, 39, 41, 45 and 54
Leave answers involving circles in terms of pi.
NOTE – Check answers on the answer sheet for 9.3 and 9.4 (not back of book)