MODULE I

CUMULATIVE REVIEW

1. Write the formulas for the following:

Area of a Rectangle: Perimeter of a Rectangle:

Area of a Circle: Circumference of a Circle:

Area of a Triangle: Perimeter of a Triangle:

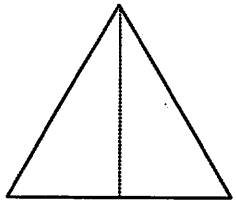
2. What is the longest side of a right triangle called?

3. Can the following be sides of a right triangle? 60, 91, and 108

For each of the following, round all answers to the nearest hundredth.

4. Find the shortest side of a right triangle if hypotenuse is 15 cm long and the other leg is 11 cm long.

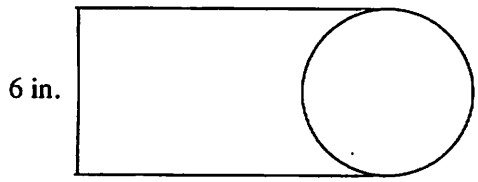
5. Find the area and permimeter of an equilateral triangle with side length 8 cm.



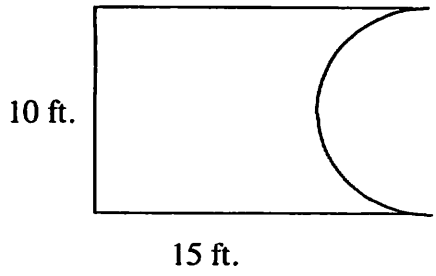
6. Find the volume of a box that measures 4 ft by 2 ft by 6 feet. (V = lwh)

7. Find the volume of a sphere with DIAMETER 10 feet. ($V = \frac{4}{3}\pi r^3$)

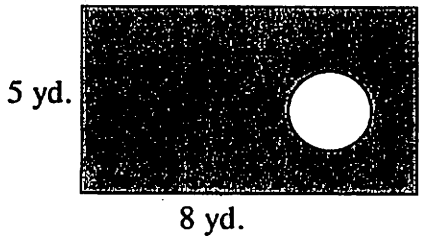
8. Find the area and perimeter of the shape shown below.



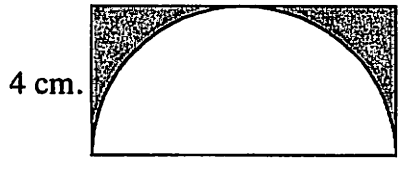
9. Find the area and perimeter of the shape shown below.



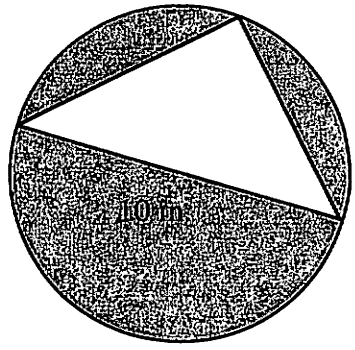
10. Find the shaded area. The radius of the circle is 1 yd.



11. Find the shaded area.



12. Find the shaded area.



NO CALCULATOR ON THE FOLLOWING QUESTIONS:

13. Round 3268.091 to the nearest hundred.

14. Divide 8580 by 52.

15. Evaluate: $3+12^2+4\cdot 2-6\cdot 3^2$

16. Estimate the product of 892 and 19.

17. Evaluate: $\frac{1}{2}\div\left(1\frac{1}{9}+\frac{4}{7}\right)$

18. What is the LCM of 15 and 6?

19. What is the GCF of 15 and 6?

20. Find $\frac{3}{8}$ of the difference of 10.2 and 8.7.

21. Round 15.9781 to the nearest tenth.

22. Subtract 15.8 from 100.36.

23. Write 0.24 as a fraction in lowest terms.

24. Solve the equation:
$6(6-x)=3x$

25. Solve the equation:
$\frac{x}{2}-\frac{1}{3}=\frac{2x+3}{6}$

26. Solve the equation:
$2(3x-1)-3(x+5)=4$

CALCULATOR OK on the remaining questions.

27. If a 10 foot tree casts a shadow that is 18 feet long, how tall is a pole that casts a shadow that is 80 feet long?

28. Find the area of a right triangle that has a hypotenuse that is 30 feet and a leg that is 24 feet.

29. What is the percent discount if a car originally priced at $22,000 is now selling for $19,250?

30. Solve the proportion: $\frac{15}{x}=\frac{3}{2x-1}$

31. Find the unit price: 34 oranges for $5.75.

32. An account earns 5% each year, compounded annually. Three years ago, the balance was $2000. How much is in the account now?