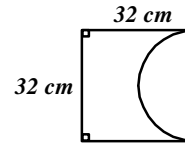


MTH053 Review Problems for Test 1

This is not a sample test. These problems are designed to get you started on your review for the test. Study the homework from the textbook and your class notes for a more complete review.

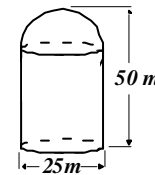
Section 1-2

1. Determine the perimeter of the geometric figure shown to the right.



Section 1-3

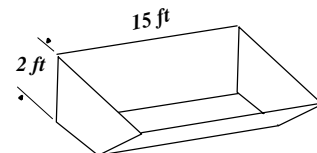
2. A grain storage container is in the shape of a cylinder topped with a hemisphere as illustrated to the right. The outer surface, not including the bottom, is to be painted. Determine the number of liters of paint needed if one liter of paint covers 6 square meters.



Section 1-4

3. Determine the volume of the grain storage container in exercise 2.

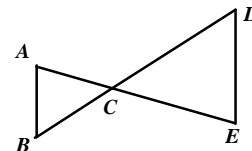
4. A feed trough is to be constructed so that the ends are trapezoid shaped. The ends of the trough are 18 inches at the bottom and 30 inches at the top. How many bushels of grain will it hold if one bushel is 1.24 cubic feet?



5. A marble monument is in the shape of a pyramid with a triangular base. The base has an area of 5000 square centimeters. The height of the monument is 240 centimeters. What is the weight of the monument in kilograms, if the density of the marble is 0.027 kilograms per cubic centimeter?

Section 1-1 & 1-5

6. In the sketch to the right, line AB is parallel to line DE. Determine the measure of $\angle BAC$ if $\angle DCE = 67^\circ$ and $\angle CDE = 35^\circ$.



Section 1.5

7. Five bolt holes spaced equally far apart are drilled on the circumference of a circle having a diameter of 6 inches. What are the measures (in degrees) of the central angles formed by joining the holes with the center of the circle?

Section 1.6

8. Solve $P = 2a + b$ for a

9. Solve $A = \pi r^2$ for r

10. Solve $\frac{S_A}{a} = \frac{S_B}{b}$ for a