The Division of Water Quality makes no claim as the accuracy of any answers provided herein.
PRACTICE PROBLEMS 11.1: Volumes—Basic Shapes

Calculate the cubic feet volume of the figures shown below:

1. 20 ft  
   10 ft  
   60 ft  

ANS_____

2. 15 ft  
   70 ft  

ANS_____

3. 10 ft  
   5 ft  
   3 ft  

ANS_____

4. 5 ft  

ANS_____

5. 60 ft  
   3 ft  

ANS_____

6. 20 ft  
   8 ft  
   3 ft  
   5 ft  

ANS_____
PRACTICE PROBLEMS 11.1: Volumes—Basic Shapes (Continued)

Complete the following problems, as indicated.

7. A clarifier has a diameter of 50 ft. If the depth of water in the clarifier is 15 ft, how many cubic feet of water are in the clarifier?

ANS_____

8. A rectangular basin 25 ft wide and 75 ft long contains 28,125 cubic feet of water. What is the depth of the water in the tank?

ANS_____

9. The bottom portion of a tank is a triangular prism. If the base of the triangle is 20 ft, the depth of the triangular part of the tank is 3 ft and the length of the tank is 60 ft, how many cubic feet of water will this triangular portion hold?

ANS_____

10. What is the cubic feet capacity of a 2000-ft section of 18-inch-diameter pipe?

ANS_____

PRACTICE PROBLEMS 11.2: Volumes—Combined Shapes

- Calculate the cubic feet volume of the figures shown below.

1. [Diagram of a rectangular prism with dimensions 5 ft x 15 ft x 4 ft.]
   - Ans: ______

2. [Diagram of a cylinder with a diameter of 15 ft and height of 2.5 ft.]
   - Ans: ______

3. [Diagram of a prism with dimensions 60 ft x 5 ft x 3 ft.]
   - Ans: ______

4. [Diagram of a prism with dimensions 30 ft x 6 ft x 10 ft.]
   - Ans: ______

5. [Diagram of a cylinder with a diameter of 6 ft and height of 2 ft.]
   - Ans: ______