1. What is the volume of the triangular prism?
2. Calculate the base of the cylinder. Round your answer to the nearest square centimeter.

b) Find the volume of the cylinder.

c) What is the volume of the cylinder in cubic meters?

3. A box has a volume of 50 ft3. The area of the box is 12 ft2. What is the height of the box?

4. A storage space in the shape of a rectangular prism has a length of 7 m, and a width of 9 m. The volume is 147 m3. What is the height of the prism?

5. Heating and air-conditioning installers need to calculate volume.

1. A banquet room has dimensions of 45 feet by 60 feet by 15 feet. What is the volume of the banquet room?
2. Express your answer to the nearest cubic yard.

6. Determine the volume of the concrete needed to build the ramp shown. Round your answer to the nearest tenth of a cubic centimeter.

7. Explain the difference between the capacity of a bathtub and the volume of a bathtub.

8. An 8 inch spherical bowl is 2/3 of the way full with juice. What is the volume of the juice?



9. A cylinder is cut from a rectangular prism as shown. What is the volume of the remaining rectangular prism?



10. A cone with a radius of r = 5 cm and height h = 10 cm just fits inside a cylinder with the same radius and height. What is the volume in the cylinder that is not occupied by the cone?



11. A prism has volume of 4576 *cm3* and a base area of352 *cm2*, find the height of the prism.

12. A rectangular pool has a volume1620 *m3*, the width measures 9 m and the length is 15 m. How deep is it?

13. Find the volume of the trapezoidal prism.



14. A square base rectangular box can hold 3197.4 cm3 of material with the height measuring 15 cm. Find length of the sides of the base.

15. The volume of the triangular prism shown below is972 cm3. Determine the height of the triangle.



16. Six Toblerone chocolate bars are put together to form a hexagonal prism. The dimensions of a single bar are given below. Determine the volume of a box of six.



17. A side of an equilateral triangular sandbox measures 3 ft in length and 2 ft deep. If the box is 90% filled with sand, then what is the volume of sand?



18. If the surface area of a cube is150 cm2, then determine the volume of the cube.

19. If the surface area of a cylinder is 330 cm2 with a radius of 6.5 cm, then find the volume of the cylinder.

20. If the surface area of a sphere is 334 cm2, then determine the volume of the sphere.

21. Convert 3540 cm3 into m3.

22. If you fill your car with 8.5 gallons of gasoline, how many liters did you get?

23. Convert 5.6 cubic feet to cubic inches.

24. Sally is filling up a coffee urn. The coffee urn hold 5 Liters, how many cups does she have to add to fill the urn?

25. Convert 7 m3 to cm3.