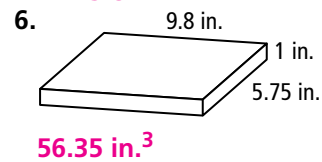
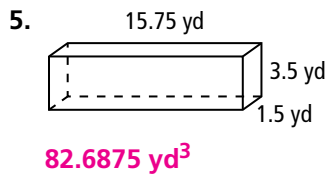
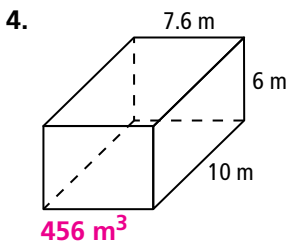
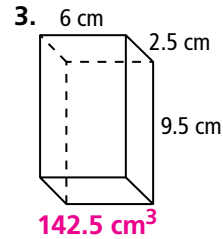
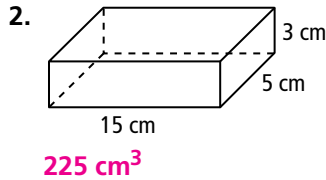
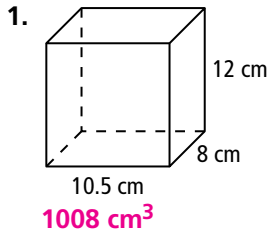


Practice

Form G

Volumes of Prisms and Cylinders

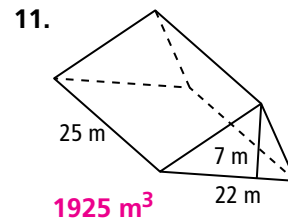
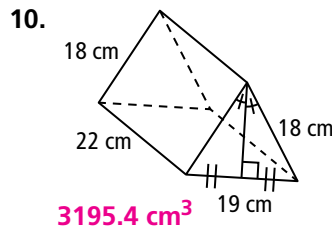
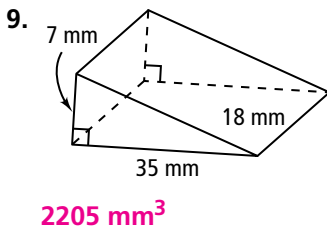
Find the volume of each rectangular prism.



7. The base is a square, 4.5 cm on a side. The height is 5 cm. **101.25 cm^3**

8. The base is a rectangle with length 3.2 cm and width 4 cm. The height is 10 cm. **128 cm^3**

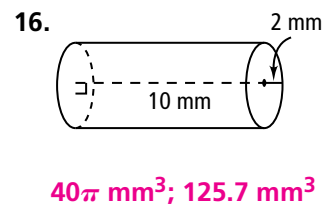
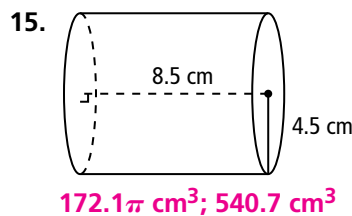
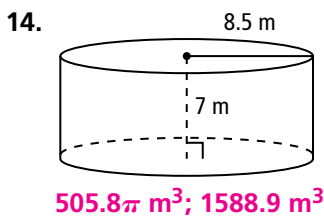
Find the volume of each triangular prism to the nearest tenth.



12. The base is a right triangle with a leg of 12 in. and hypotenuse of 15 in. The height of the prism is 10 in. **540 in.^3**

13. The base is a 30° - 60° - 90° triangle with a hypotenuse of 10 m. The height of the prism is 15 m. Find the volume to the nearest tenth. **324.8 m^3**

Find the volume of each cylinder in terms of π and to the nearest tenth.



17. a right cylinder with a radius of 3.2 cm and a height of 10.5 cm **$107.5\pi \text{ cm}^3$; 337.8 cm^3**

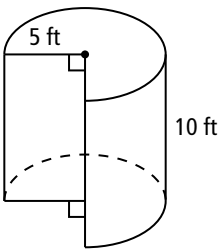
18. a right cylinder with a diameter of 8 ft and a height of 15 ft. **$240\pi \text{ ft}^3$; 754 ft^3**

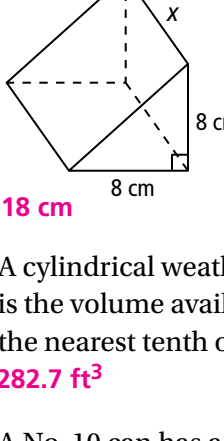
Practice (continued)

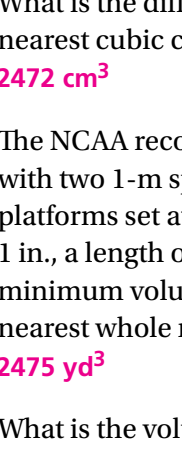
Form G

Volumes of Prisms and Cylinders

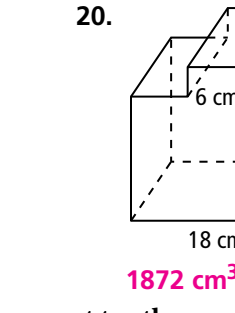
Find the volume of each composite figure to the nearest whole number.

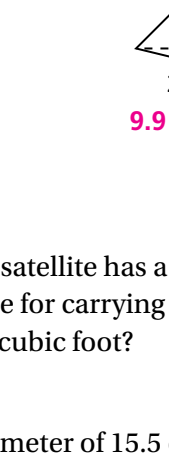
19.  **589 ft³**

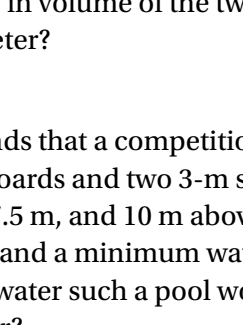
20.  **1872 cm³**

21.  **1214 in.³**

Find the value of x to the nearest tenth.

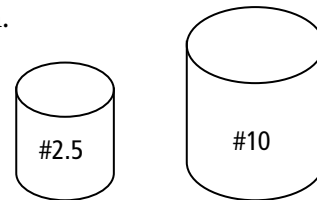
22. Volume: 576 cm^3  **18 cm**

23. Volume: 980 mm^3  **9.9 mm**

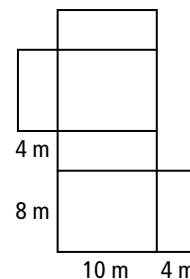
24. Volume: 602.88 cm^3  **4.0 cm**

25. A cylindrical weather satellite has a diameter of 6 ft and a height of 10 ft. What is the volume available for carrying instruments and computer equipment, to the nearest tenth of a cubic foot? **282.7 ft³**

26. A No. 10 can has a diameter of 15.5 cm and a height of 17.5 cm. A No. 2.5 can has a diameter of 9.8 cm and a height of 11 cm. What is the difference in volume of the two can types, to the nearest cubic centimeter? **2472 cm³**



27. The NCAA recommends that a competition diving pool intended for use with two 1-m springboards and two 3-m springboards, in addition to diving platforms set at 5 m, 7.5 m, and 10 m above the water, have a width of 75 ft 1 in., a length of 60 ft, and a minimum water depth of 14 ft 10 in. What is the minimum volume of water such a pool would hold in cubic yards, to the nearest whole number? **2475 yd³**



28. What is the volume of the solid figure formed by the net? **320 m³**