

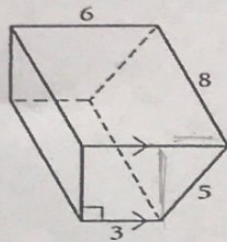
Chapter 11 Study Guide #2

1. Find the area and circumference of a circle with a diameter of 48 inches. The circumference of a circle is 30π cm, what is the area of the circle?

$A = 576\pi \text{ in}^2$ $C = 48\pi \text{ in}$

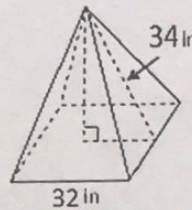
$A = 225\pi \text{ cm}^2$

3. Find the volume.



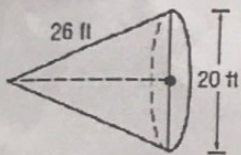
$V = 144 \text{ u}^3$

4. Find the volume.



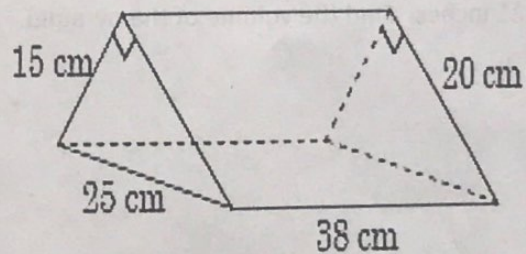
$V = 10240 \text{ in}^3$

5. Find the volume.



$V = 800\pi \text{ ft}^3$

6. Find the volume.



$V = 5700 \text{ cm}^3$

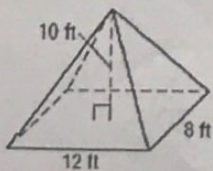
7. Find the volume of a sphere whose surface area is $1,296\pi \text{ cm}^2$.

$V = 7776\pi \text{ cm}^3$

8. A regular pyramid has a right triangle as a base. The right triangle has a hypotenuse of 26 cm and a leg of 24 cm. The height of the pyramid is 30 cm. Find the volume of the pyramid.

$V = 1200 \text{ cm}^3$

9. Find the volume.



$V = 320 \text{ ft}^3$

10. Find the surface area of a sphere with a great circle that has an area of $289\pi \text{ mi}^2$.

$SA = 1156\pi \text{ mi}^2$

11. Find the radius of a sphere with a surface area of $784\pi \text{ in}^2$.

$$r = 14 \text{ in}$$

The volume of a cone is $180\pi \text{ yd}^3$. The height of the cone is 15 yd. Find the radius of the cone.

$$r = 6 \text{ yd}$$

13. The volume of a cylinder is $300\pi \text{ in}^3$. The height of the cylinder is 24 in. Calculate the radius of the cylinder to the nearest tenth of a centimeter.

$$r = 3.5 \text{ in}$$

14. The volume of a cylinder is $6,450 \text{ in}^3$. The height of the cylinder is 120 in. Calculate the radius of the cylinder to the nearest tenth of a centimeter.

$$r = 4.1 \text{ in}$$

15. The base of a pyramid is a right triangle with leg lengths of 24 inches and 45 inches. The height of the pyramid is 21 inches. Find the volume of the pyramid.

$$V = 3780 \text{ in}^3$$

16. Find the volume of a rectangular prism with a length of 30 cm, width of 12 cm and a height of 24 cm.

$$V = 8640 \text{ cm}^3$$

17. Find the volume of a cylinder that has a radius of 14 cm and a height of 25 cm.

$$V = 4900\pi \text{ cm}^3$$

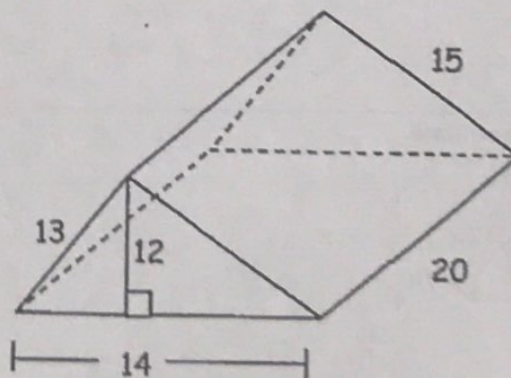
18. Find the volume of a cone that has a diameter of 14 yards and a slant height of 25 yards.

$$V = 392\pi \text{ yd}^3$$

19. A regular square pyramid has base edge 18 cm and volume $1,728 \text{ cm}^3$. Find the height.

$$h = 16 \text{ cm}$$

20. Find the volume.



$$V = 1680 \text{ u}^3$$