

May 24, 2007

Ch. 8.2 & 8.3 Area*

More with Area and Surface Area*

Area of Shaded Regions*

More Area of Shaded Regions*

Ch. 8.4 Area of a Trapezoid*

Ch. 8.6 Area of a Circle*

Ch. 8.5 Circles and Circumference*

Area of Shaded Regions with Circles*

Ch. 8.7 Measuring Volumes*

Ch. 8.7 Volume*

Ch. 8.7 Volume cont.*

Volume of a Sphere*

→ $V = \frac{4}{3} \pi r^3$

Ch. 8.7 Cylinder*

→ $V = A_B \cdot h$ where $A_B = A_G = \pi r^2$

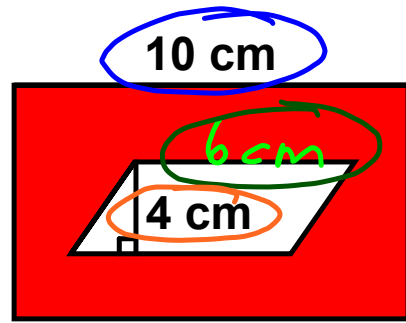
4 Tetrahedron

8 Octahedron

6 Hexahedron

20 Icosahedron

12 Dodecahedron



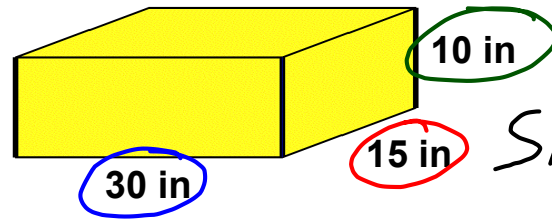
$$A_{SR} = A_R - A_P$$
$$= 80\text{cm}^2 - 24\text{cm}^2$$

$$A_R = b \cdot h$$
$$= 10\text{cm} \cdot 8\text{cm}$$
$$= \underline{\underline{80\text{cm}^2}}$$

$$A_P = b \cdot h$$
$$= 6\text{cm} \cdot 4\text{cm}$$
$$= \underline{\underline{24\text{cm}^2}}$$

$$= \underline{\underline{56\text{cm}^2}}$$

Surface Area



$$SA = A_{\text{Top}} + A_{\text{Bottom}} + A_{\text{Side}} + A_{\text{Side}} + A_{\text{Front}} + A_{\text{Back}}$$

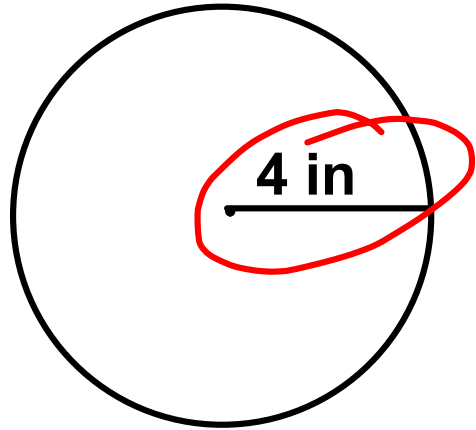
$$A_{\text{Top}} = 30\text{ in} \cdot 15\text{ in}$$
$$A_{\text{Bottom}} = \underline{450\text{ in}^2}$$

$$A_{\text{Sides}} = 15\text{ in} \cdot 10\text{ in}$$
$$= \underline{150\text{ in}^2}$$

$$A_{\text{Front}} = 30\text{ in} \cdot 10\text{ in}$$
$$A_{\text{Back}} = \underline{300\text{ in}^2}$$

$$SA = 450\text{ in}^2 + 450\text{ in}^2 + 150\text{ in}^2 + 150\text{ in}^2 + 300\text{ in}^2 + 300\text{ in}^2$$
$$= \underline{\underline{1800\text{ in}^2}}$$

Circumference



$$C = d\pi \text{ or } C = 2\pi r$$

$$C = 2\pi r$$

$$= \underline{2\pi} (\underline{4in})$$

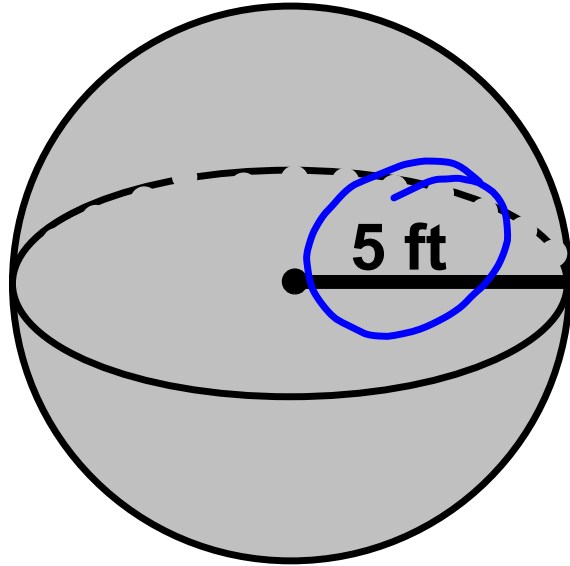
$$\text{exact Ans} \rightarrow \underline{\underline{8\pi in}}$$

$$\approx 8(3.14)in$$

$$\text{Approx Ans} \rightarrow \underline{\underline{\approx 25.12 in}}$$

Volume of a Sphere*

$$\rightarrow V = \frac{4}{3} \pi r^3$$



$$V = \frac{4}{3} \pi (5 \text{ ft})^3$$

$$= \frac{4}{3} \pi 125 \text{ ft}^3$$

$$\approx 523.33 \text{ ft}^3$$

ch 8
Test tomorrow.
