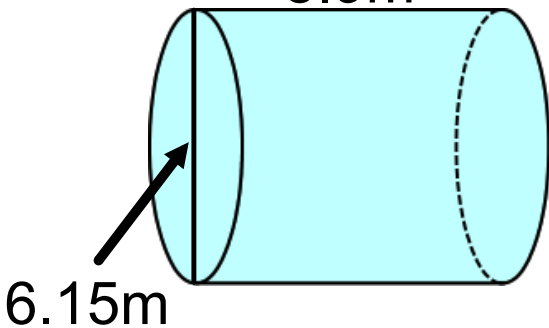


HW: Worksheet/4-6 (find SA and V), 7

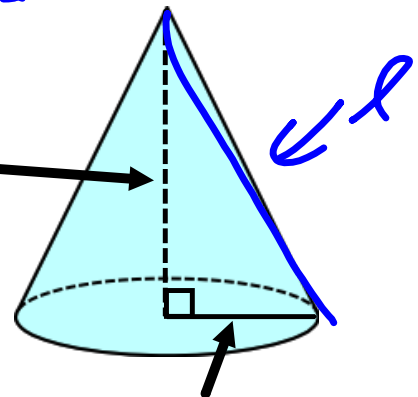
Warm up:

Find the surface area.

1) $2(3.14)(3.075)^2 + 2(3.14)(3.075)(8.9)$
 $231.25 m^2$



2) $\pi r^2 + \pi r l$
 $21^2 + 20^2 = c^2$
 $441 + 400$
 $\sqrt{841} = c$
 $29 = c$



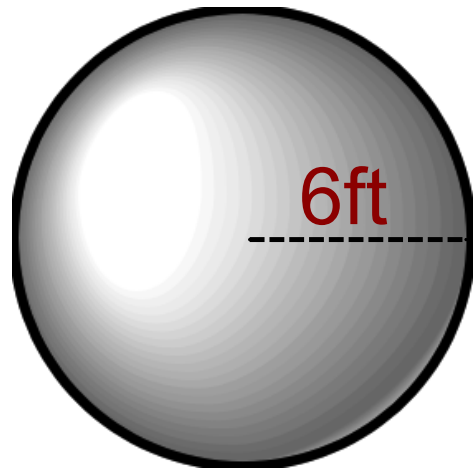
$3.14(20)^2 + 3.14(20)(29)$
 $3077.2 in^2$

Sphere

$$S.A. = 4\pi r^2$$

$$4(3.14)(6)^2$$

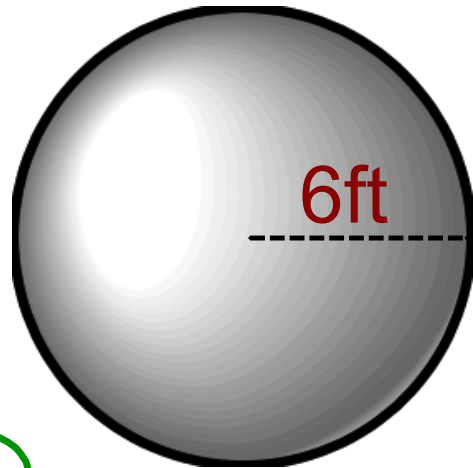
$$452.16 \text{ ft}^2$$



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

$$(4 \div 3) \times 3.14 \times 6^3$$

$$904.32 \text{ ft}^3$$

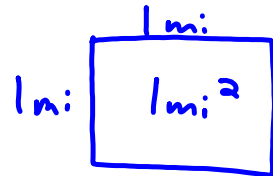


The diameter of earth is 7917.5mi. Find the surface area and volume. $\frac{7917.5}{2} = 3958.75$

SA) $4\pi r^2$

$$4(3.14)(3958.75)^2$$

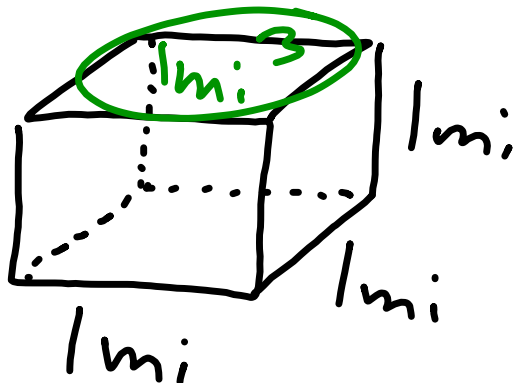
$$196836571.6 \text{ mi}^2$$

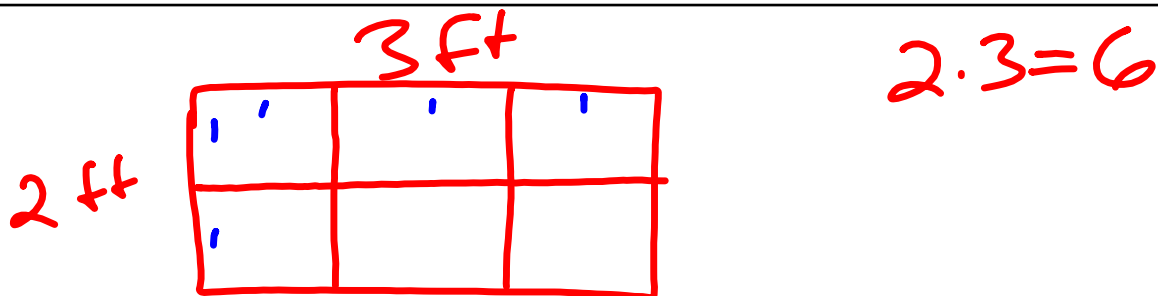


V) $\frac{4}{3}(3.14)(3958.75)^3$

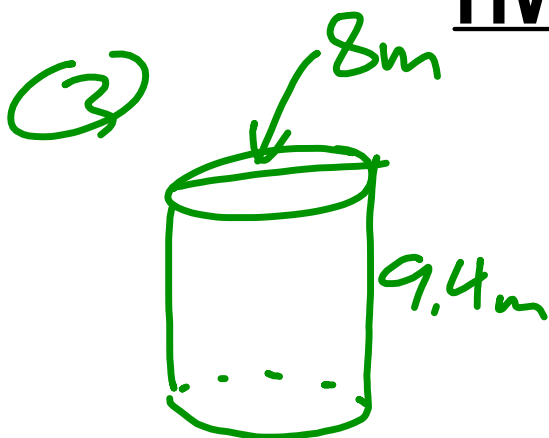
$$2.597422593 \times 10^{11}$$

$$259,742,259,300 \text{ mi}^3$$





HW Solutions



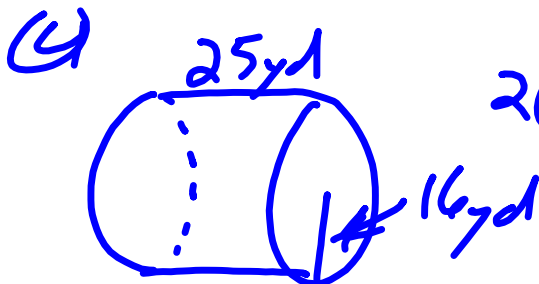
$$r = 4$$

$$2\pi r^2 + 2\pi r h$$

$$2(3.14)(4)^2 + 2(3.14)(4)(9.4)$$

$$336.608$$

$$336.6m^2$$

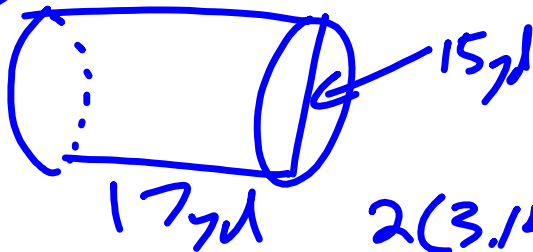


$$2(3.14)(16)^2 + 2(3.14)(16)(25)$$

$$4119.68$$

$$4119.7yd^2$$

10

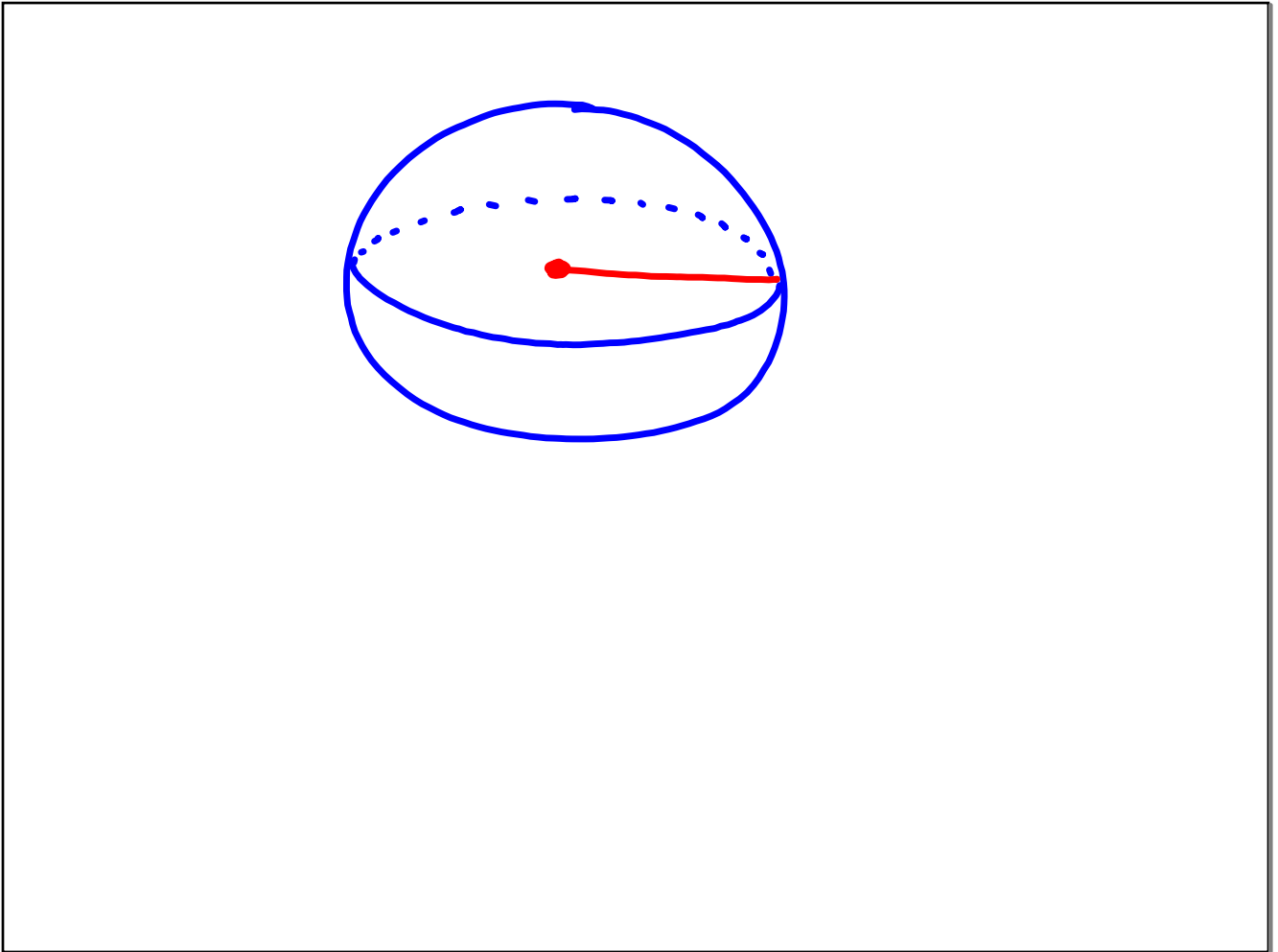


$$15 \div 2 = 7.5$$

$$2(3.14)(7.5)^2 + 2(3.14)(7.5)(17)$$

$$1153.95 \text{ yd}^2$$

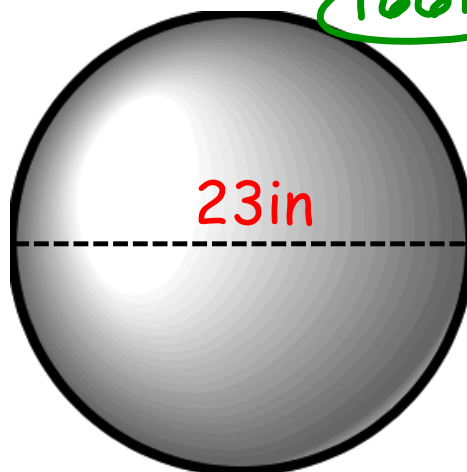
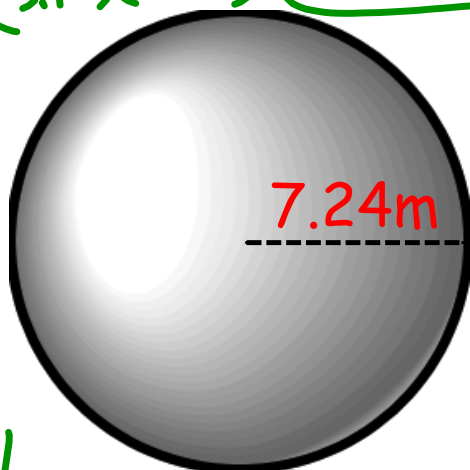
$$1154 \text{ yd}^2$$



Find the surface area and volume.

$$\frac{SA}{4}(3.14)(7.24)^2 = 658.37 \text{ m}^2$$

$$4(3.14)(11.5)^2 = 1661.06 \text{ in}^2$$



$$\frac{V}{\frac{4}{3}}(3.14)(7.24)^3 = 1588.85 \text{ m}^3$$

$$\frac{4}{3}(3.14)(11.5)^3 = 6367.40 \text{ in}^3$$

