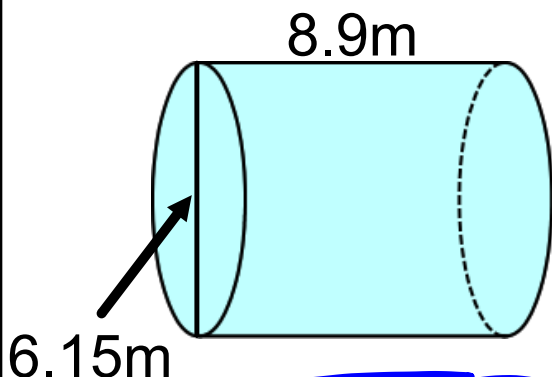


HW: Worksheet/4-6 (find SA and V), 7

**Warm up:**

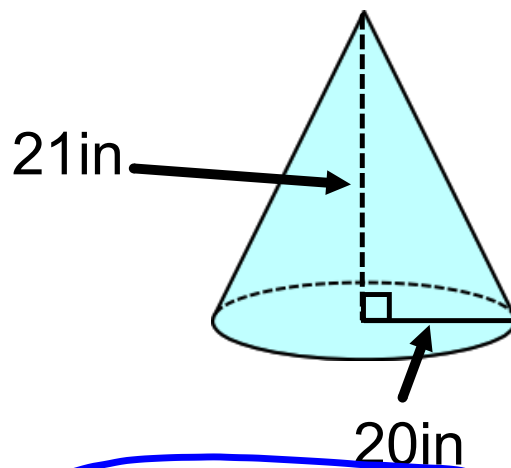
Find the surface area.

1)



$$231.25 \text{ m}^2$$

2)



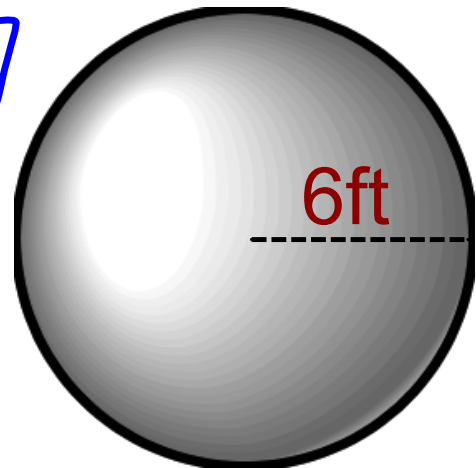
$$3077.2 \text{ in}^2$$

# Sphere

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

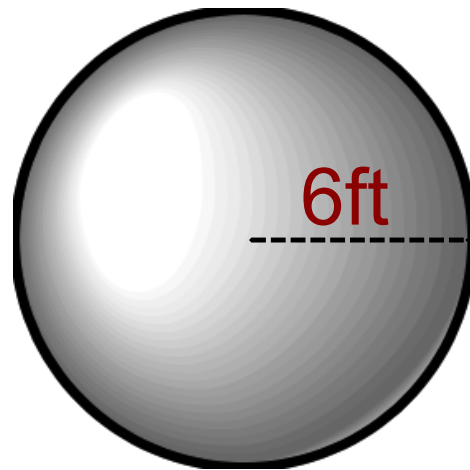
$$4(3.14)(6)^2$$

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



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

$$(4 \div 3) \times 3.14 \times 6^3$$
$$904.32 \text{ ft}^3$$



The diameter of earth is 7917.5mi. Find the surface area and volume.

$$\frac{7917.5}{2} = 3958.75 \text{ mi}$$

↑ radius

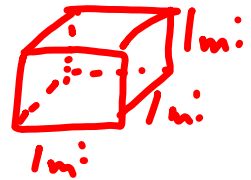
$$\text{SA) } 4(3.14)(3958.75)^2$$

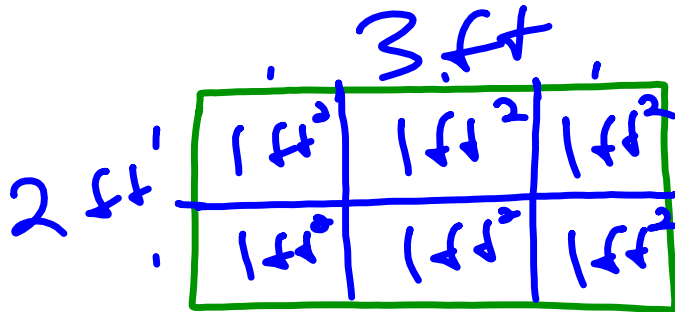
$$196,836,571.6 \text{ mi}^2$$

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

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

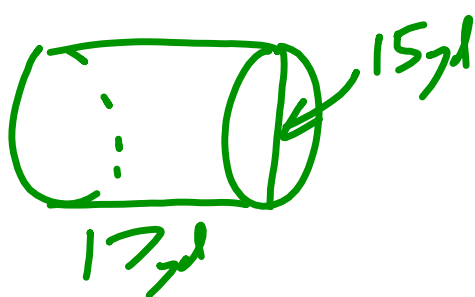
$$259,742,259,300 \text{ mi}^3$$





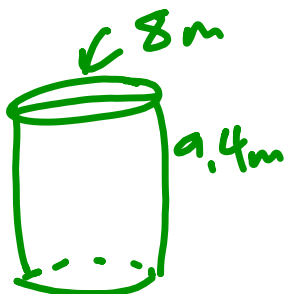
## HW Solutions

(10)



$$2(3.14)(7.5)^2 + 2(3.14)(7.5)(17)$$
$$1153.95 \text{ yd}^2$$

③



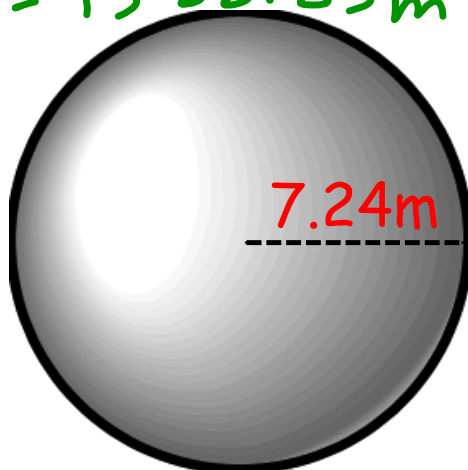
$$2(3.14)(4)^2 + 2(3.14)(4)(9.4)$$

$$336.608$$

$$336.61 \text{ m}^2$$

Find the surface area and volume.

$$SA = 658.37 \text{ m}^2$$
$$V = 1588.85 \text{ m}^3$$



$$SA = 1661.06 \text{ in}^2$$
$$V = 6367.40 \text{ in}^3$$

