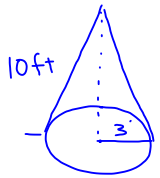
CH 10-10 Volume of Pyramids, Cones and Spheres.

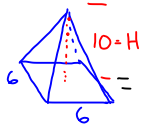
$\frac{1}{3} \times$ Base Area $\times$ Height



$\frac{1}{3} \times \pi \times r \times r \times H$

$= \frac{1}{3} \times 3.14 \times 3 \times 3 \times 10$

$= 94.2 ft^3$

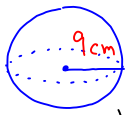


$\frac{1}{3} \times$ B. Area $\times H$

$= \left(\frac{1}{3} \times 6 \times 6 \times 10\right)$

$= 2 \times 6 \times 10$

$= 120 in^3$

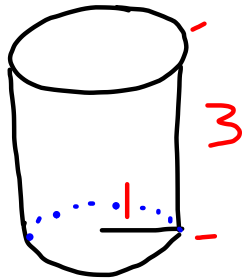


$V_{sphere} = \frac{4}{3} \pi r^3$

$V = \frac{4 \times 3.14 \times r \times r \times r}{3}$

$V = \frac{4 \times 3.14 \times 9 \times 9 \times 9}{3}$

$= 3,052.08 cm^3$

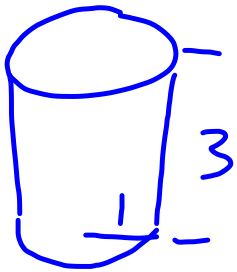


$V_c = \pi r^2 \times H$

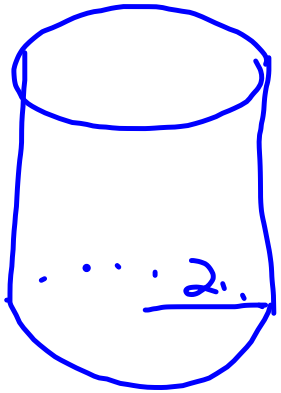
$= 3.14 \times 3 = 9.42$

$= 3.14 \times 6 = 18.84$

$= \frac{1}{2}$



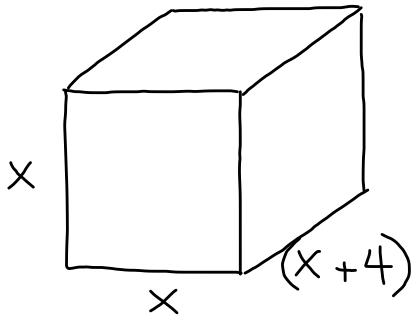
9.42



$\pi \times 2 \times 2 \times 3$

37.68

$$\frac{9.42}{37.68} = \frac{1}{4}$$



$V = L \times w \times H$

$= x \times x \times (x+4)$

$= x^2(x+4)$

$x^3 + 4x^2$

$4x^2$