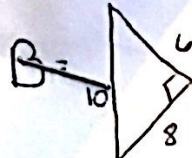


1.)  $B = \frac{6(8)}{2} = 24 \text{ in}^2$

$V = Bh = 24(3) = 72 \text{ in}^3$

$\Sigma A = 2B + \text{Lateral}$

$2(24) + 6(3) + 8(3) + 10(3) = 120 \text{ in}^2$

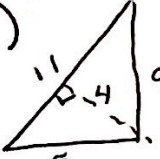
3.) $V = \frac{4\pi r^3}{3}$

$= \frac{4\pi 6^3}{3} = \frac{864\pi}{3}$

$= 288\pi \text{ ft}^3 \approx 904.8 \text{ ft}^3$

$\Sigma A = 4\pi r^2$

$4\pi 6^2 = 144\pi \text{ ft}^2 \approx 452.4 \text{ ft}^2$

5.)  $B = \frac{11(4)}{2} = 22 \text{ km}^2$

$V = Bh = 22(6) = 132 \text{ km}^3$

$\Sigma A = 2B + \text{Lateral}$

$2(22) + 11(6) + 9(6) + 5(6) = 194 \text{ km}^2$

7) omit

8.) $V = Bh = \pi r^2 h$

$= \pi(2)^2(9)$

$= 36\pi \text{ mi}^3 \approx 113.1 \text{ mi}^3$

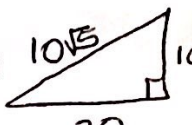
$\Sigma A = 2B + \text{Lateral}$

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

$2\pi(2)^2 + 2\pi(2)(9)$

$8\pi + 36\pi$

$44\pi \text{ mi}^2 \approx 138.2 \text{ mi}^2$

2.)  $10\sqrt{5}$

$V = \frac{Bh}{3} = \frac{\pi r^2 h}{3} = \frac{\pi(10)^2(20)}{3}$

$666.7\pi = 2094.395 \text{ m}^3$

$\Sigma A = B + \text{Lateral}$

$\pi(10)^2 + \pi r h$

$\pi(100) + \pi(10)(20)$

$(100\pi + 200\pi)$

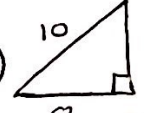
$314.2 + 702.5 \approx 1016.7 \text{ m}^2$

4.) $V = Bh = 6(6)(7) = 252 \text{ m}^3$

$\Sigma A = 2B + \text{Lateral}$

$2lw + 2lh + 2hw$

$2(6)(6) + 2(6)(7) + 2(7)(6) = 72 + 84 + 84 = 240 \text{ m}^2$

6.)  10

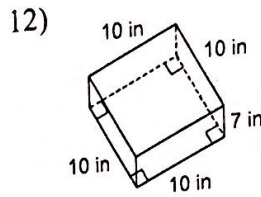
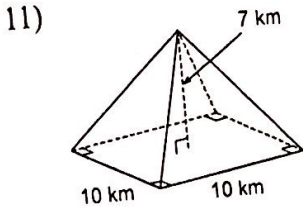
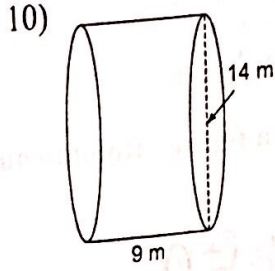
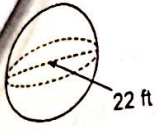
$B = \frac{6(8)}{2} = 24 \text{ mi}^2$

$V = Bh = 24(9) = 216 \text{ mi}^3$

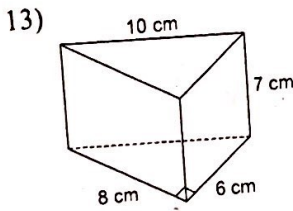
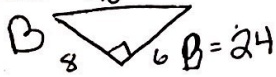
$\Sigma A = 2B + \text{Lateral}$

$2(24) + 8(9) + 10(9) + 6(9) = 264 \text{ mi}^2$

10.3



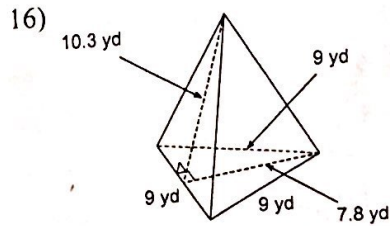
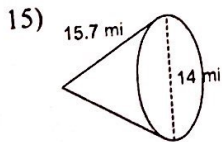
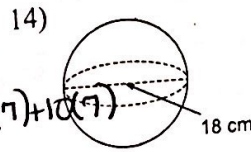
Find the surface area of each figure. Round your answers to the nearest hundredth, if necessary.



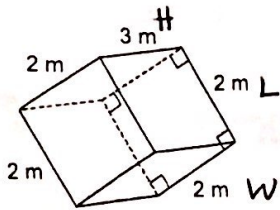
$$SA = 2(24) + 8(7) + 6(7) + 10(7)$$

$$= 216 \text{ cm}^2$$

$$V = 24(7) = 168 \text{ cm}^3$$



17)



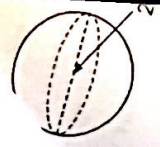
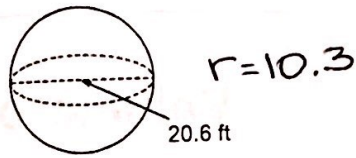
$$SA = 2LW + 2LH + 2HW$$

$$2(2)(2) + 2(2)(3) + 2(3)(2)$$

$$32 \text{ m}^2$$

$$V = 2(2)(3) = 12 \text{ m}^3$$

18)

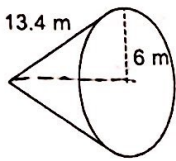
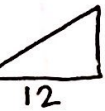


$$SA = 4\pi r^2$$

$$= 424.36\pi \text{ ft}^2$$

$$V = \frac{4\pi r^3}{3} = 1456.97\pi \text{ ft}^3$$

19)

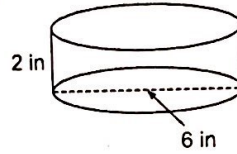


$$SA = \pi(36) + \pi(6)13.4$$

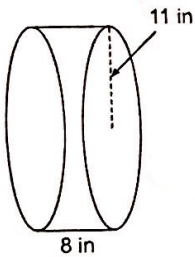
$$116.4\pi \text{ m}^2$$

$$V = \frac{\pi(36)(12)}{3} = 144\pi \text{ m}^3$$

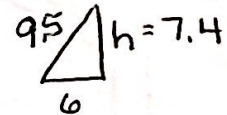
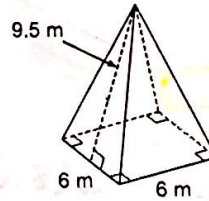
20)



21)



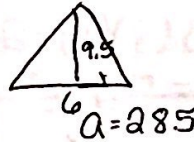
22)



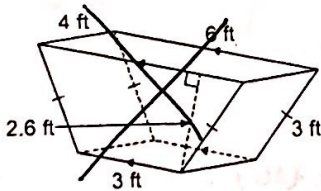
$$V = \frac{36(7.4)}{3} \approx 88.39 \text{ m}^3$$

$$SA = 36 + 4(28.5)$$

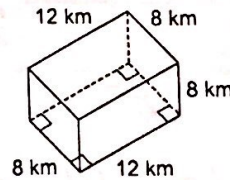
$$= 150 \text{ m}^2$$



23)



24)

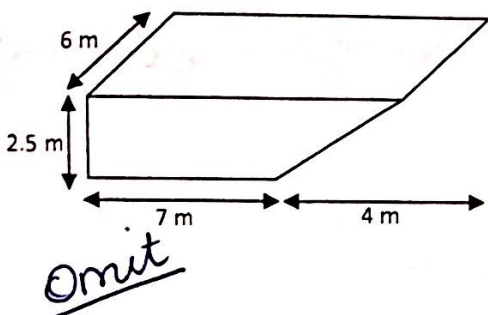


Volume of Composite Figures

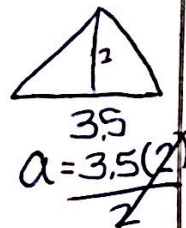
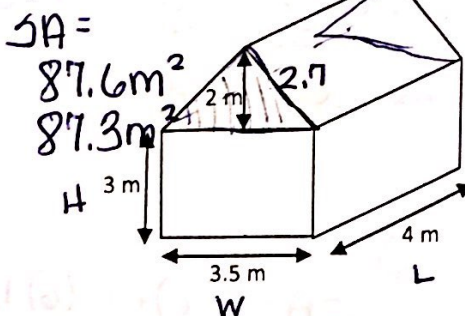
SA.

Find the volume. If necessary, round to the hundredths place. Use ~~3.14~~ for π . Not drawn to scale.

1)



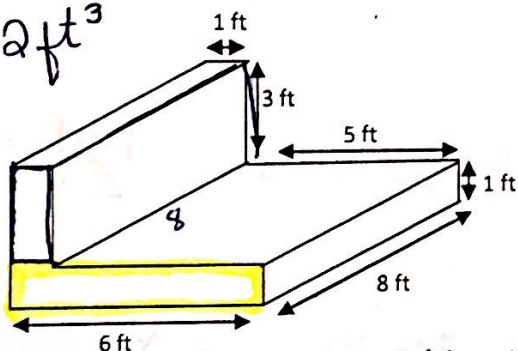
2) $V = 56m^3$



SA =
 $87.6m^2$
 $87.3m^2$

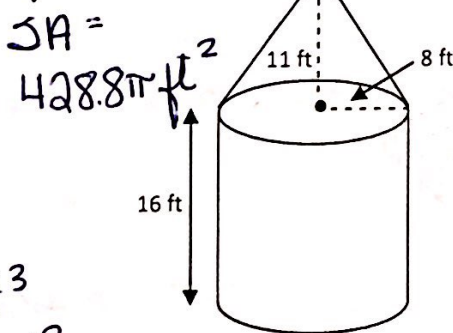
3)

$V = 72ft^3$



$V = Bh = 6(8)(1) = 48ft^3$
 $V = Bh = 3(8)(1) = 24ft^3$
 $V_T = 72ft^3$

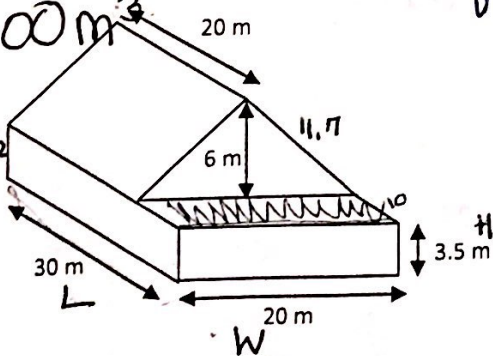
4) $V = 1258.7\pi ft^3$



SA =
 $428.8\pi ft^2$

5)

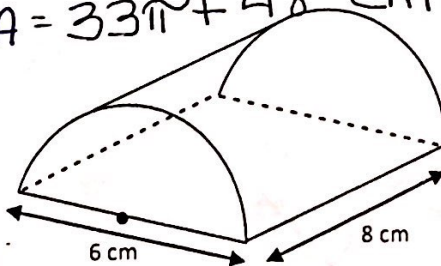
$V = 3300m^3$
 SA
 $1738m^2$



$S = 30(20) + 2(30)(3.5) + 2(3.5)(20) + 20(10)$
 $1150m^2$

6)

$V = 36\pi cm^3$
 SA = $33\pi + 48 cm^2$



$S = 2B + lateral = 2(60) + 11.7(20) + 11.7(20)$
 $588m^2$