

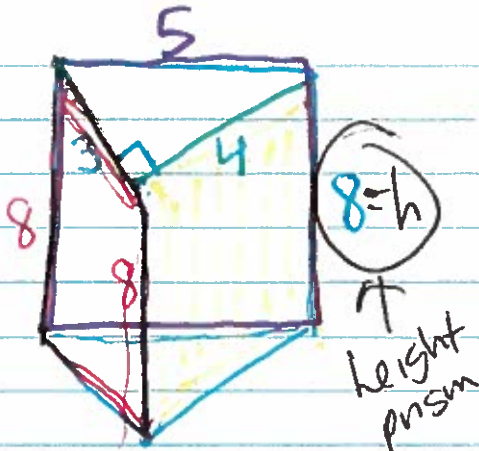
Quiz Review

area

915

$$2 \cdot \triangle + \square + \square + \square$$

①



triangular prism

S.A.

$$2 \left(\frac{1}{2} \cdot 3 \cdot 4 \right) + 8 \cdot 3 + 8 \cdot 4 + 8 \cdot 5$$

$$12 + 24 + 32 + 40 = 108 \text{ in}^2$$

$$V = \text{area } \triangle \cdot \text{height prism}$$

$$V = \left(\frac{1}{2} \cdot 3 \cdot 4 \right) (8)$$

$$V = 48 \text{ in}^3$$

②



radius = 8 in

S.A.

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

$$2\pi \cdot 8^2 + 2\pi \cdot 8 \cdot 22$$

$$128\pi + 352\pi$$

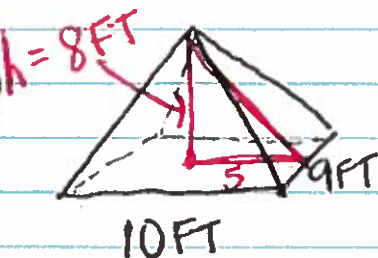
$$S.A. = 480\pi \text{ in}^2$$

$$V = \pi r^2 h$$

$$V = \pi \cdot 8^2 \cdot 22$$

$$V = 1408\pi \text{ in}^3$$

③

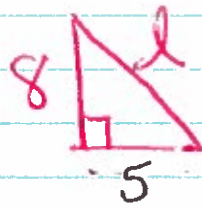
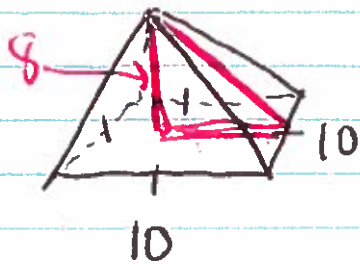


$$V = \frac{1}{3} (\text{area base rectangle}) (\text{height pyramid})$$

$$V = \frac{1}{3} (10 \cdot 9) (8)$$

$$V = 240 \text{ ft}^3$$

4



$$l^2 = 8^2 + 5^2$$

$$l = 9.4$$

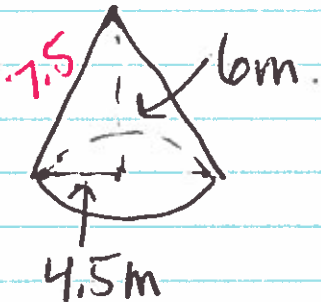
$$\text{area base} = 10 \cdot 10 = 100$$

$$\text{Perimeter base} = 4 \cdot 10 = 40$$

$$S.A. = 100 + \frac{1}{2} (40)(9.4)$$

$$S.A. = 288 \text{ m}^2$$

5



$$S.A. = \pi r^2 + \pi r l$$

$$\pi \cdot (4.5)^2 + \pi (4.5)(7.5)$$

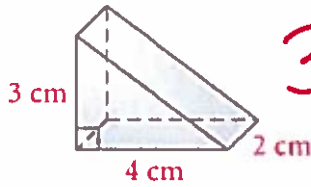
$$S.A. = 54\pi \text{ m}^2$$

$$V = \frac{1}{3} \pi r^2 h$$

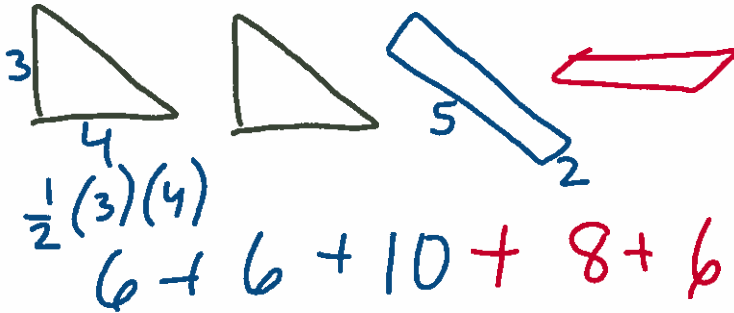
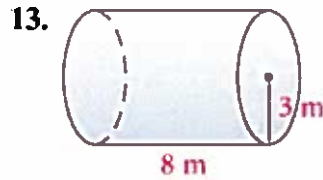
$$V = \frac{1}{3} \pi (4.5^2)(6)$$

$$V = 40.5 \text{ m}^3$$

Find the surface area and volume of each figure. Leave your answers in terms of 12.



36cm^2

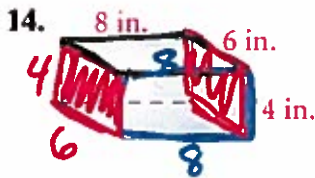


$$2\pi r^2 + 2\pi rh$$

$$2\pi \cdot 9 + 2\pi \cdot 3 \cdot 8$$

$$18\pi + 48\pi$$

$$66\pi \text{ m}^2$$



Front/Back

$$2 \cdot 8 \cdot 6 + 2 \cdot 4 \cdot 8 + 2 \cdot 4 \cdot 6$$

Sides

$$2 \cdot 48$$

top

Bottom

$$208 \text{ in}^2$$

$$S.A = 2LW + 2LH + 2WH$$

rectangular prism

$$V = L \cdot W \cdot H$$



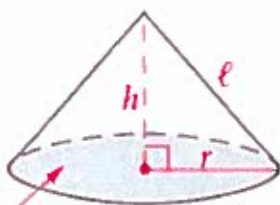
B is the area of the base.

$$\frac{1}{2} P \cdot l + \text{area Base}$$

$$\text{L.A. (pyramid)} = \frac{1}{2} p l$$

$$\text{S.A.} = \text{L.A.} + B$$

$$V = \frac{1}{3} B h$$



B is the area of the base.

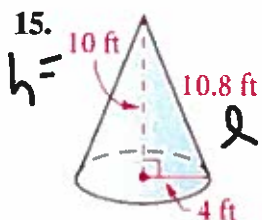
$$\text{S.A. Cone} \\ \pi r l + \pi r^2$$

$$\text{L.A. (cone)} = \pi r l$$

$$\text{S.A.} = \text{L.A.} + B$$

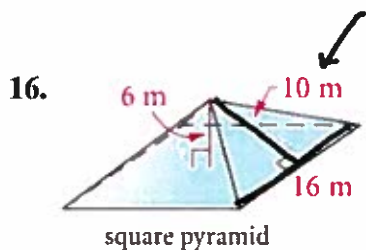
$$V = \frac{1}{3} B h$$

Find the surface area and volume of each figure. Round to the nearest tenth.



$$4\pi \cdot 4^2 + 4\pi \cdot 4(10.8)$$

$$\approx 186\pi \text{ ft}^2$$



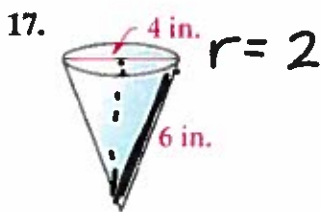
square pyramid

$$\frac{1}{2}Pl + \text{area base}$$

$$A = 16^2 \quad P = 16 \cdot 4$$

$$\frac{1}{2}(64)(10) + 256$$

$$320 + 256 = 576 \text{ m}^2$$



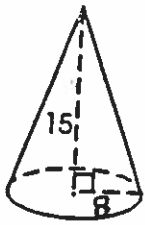
$$4\pi \cdot 2^2 + \pi \cdot 2 \cdot 6$$

$$\approx 50.3 \text{ in}^2$$

$$4\pi + 12\pi$$

$$16\pi$$

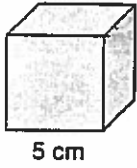
1.



$S.A. =$
(hint: Find slant height)

π Form $V =$

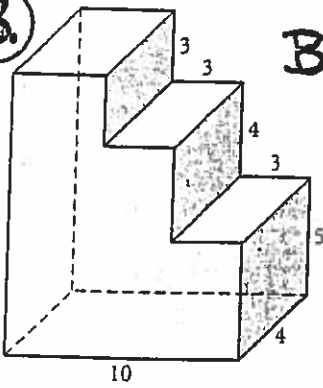
2.



$S.A. =$

$V =$

3.

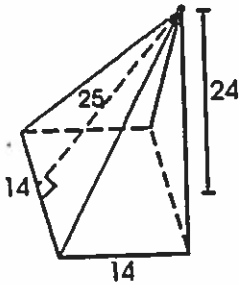


Bonus

$S.A. =$

$V =$

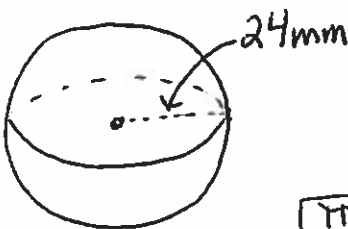
4.



$S.A. =$

$V =$

5.

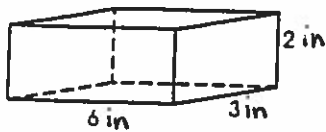


$S.A. =$

$V =$

π Form

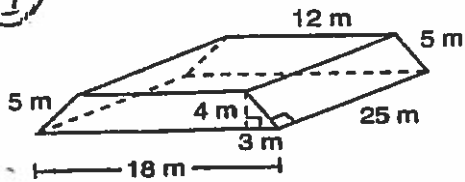
6.



$S.A. =$

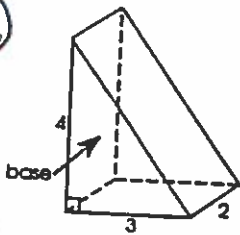
$V =$

7



$$S.A. =$$

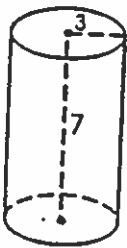
8



$$S.A. =$$

$$V =$$

9

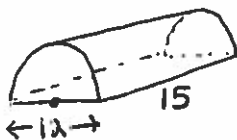


π Form
 $S.A. =$
 use 3.14 for π , round to nearest tenth
 $V =$

10. Find the volume of the water in a swimming pool that is 6 ft deep, 20 ft long and 10 feet wide. The water level is 1 foot below the top edge.

$$V =$$

11. Right Semicircular cylinder



$$V = \underline{\hspace{2cm}}$$

12. Find the volume.

$$V = \underline{\hspace{2cm}}$$

