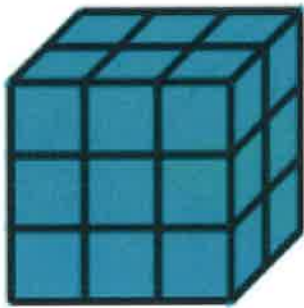
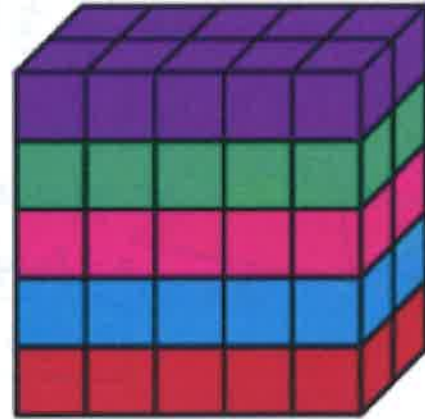


Volume

Volume: The product of the base area and the height.
How much space something takes up.
 Units³



$$\begin{aligned} V &= BH \\ &= (b \cdot h) H \\ &= (3 \cdot 2)(3) \\ &= (6)(3) \\ &= 18 \text{ units}^3 \end{aligned}$$

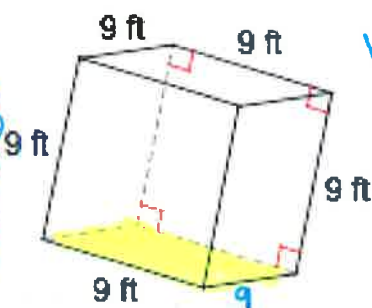


$$\begin{aligned} V &= BH \\ &= (b \cdot h) H \\ &= (5 \cdot 2)(5) \\ &= (10)(5) \\ &= 50 \text{ un}^3 \end{aligned}$$

Prism: $V = Bh$

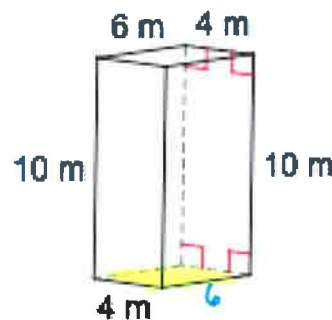
Find the volume of each solid:

1)



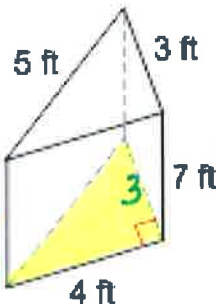
$$\begin{aligned} V &= BH \\ &= (b \cdot h) H \\ &= (9 \cdot 9) 9 \\ &= (81) 9 \\ &= 729 \text{ ft}^3 \end{aligned}$$

2)



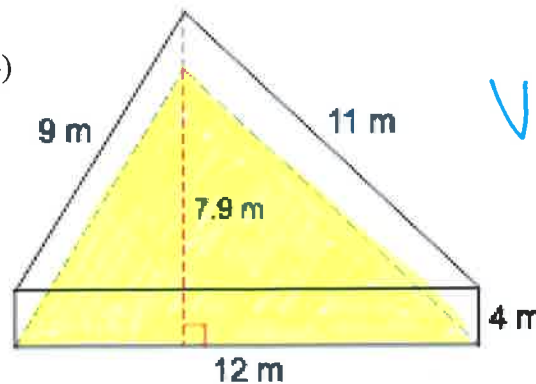
$$\begin{aligned} V &= BH \\ &= (b \cdot h) H \\ &= (4 \cdot 6) 10 \\ &= (24) 10 \\ &= 240 \text{ m}^3 \end{aligned}$$

3)



$$\begin{aligned} V &= BH \\ &= \left(\frac{1}{2} b h\right) H \\ &= \left(\frac{1}{2} \cdot 4 \cdot 3\right) 7 \\ &= (6) 7 \\ &= 42 \text{ ft}^3 \end{aligned}$$

4)



$$\begin{aligned} V &= BH \\ &= \left(\frac{1}{2} b h\right) H \\ &= \left(\frac{1}{2} \cdot 12 \cdot 7.9\right) 4 \\ &= (47.4) 4 \\ &= 189.6 \text{ m}^3 \end{aligned}$$

Rectangular
prisms
→

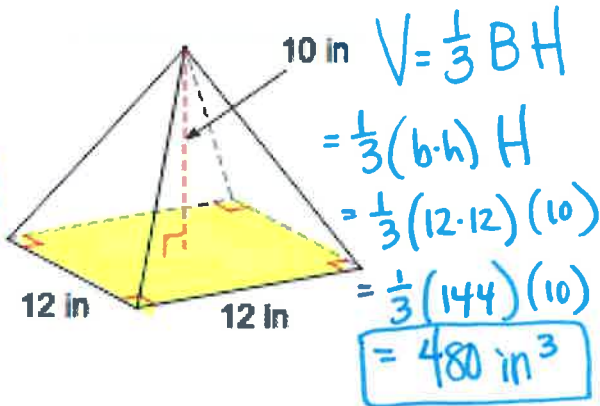
Triangular
prisms
→

$$\text{Pyramid: } V = \frac{1}{3} B h$$

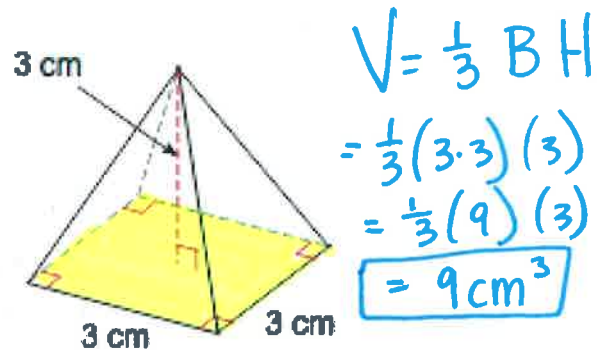
Find the volume of each solid:

1)

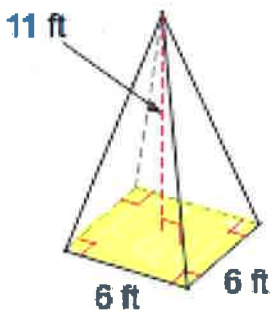
Square
Pyramids
→



2)



3)



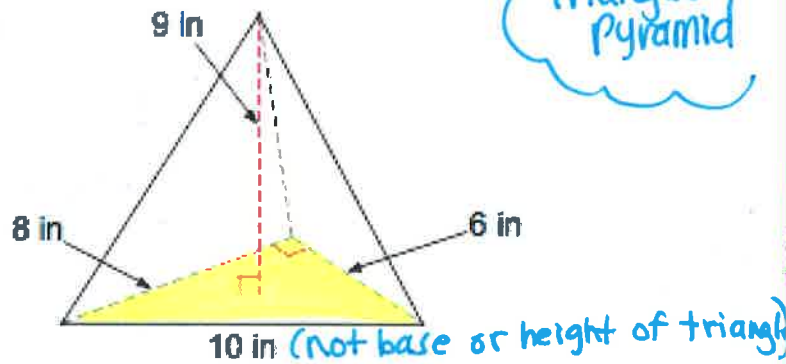
$$V = \frac{1}{3} B H$$

$$= \frac{1}{3} (6 \cdot 6) (11)$$

$$= \frac{1}{3} (36) (11)$$

$$= 132 \text{ ft}^3$$

4)



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

$$= \frac{1}{3} \left(\frac{1}{2} b h \right) H$$

$$= \frac{1}{3} \left(\frac{1}{2} 8 \cdot 6 \right) 9$$

$$= \frac{1}{3} (24) 9$$

$$= 72 \text{ in}^3$$