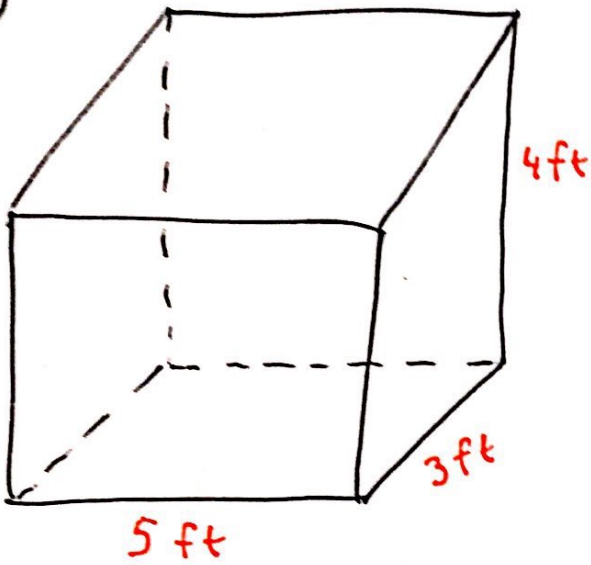


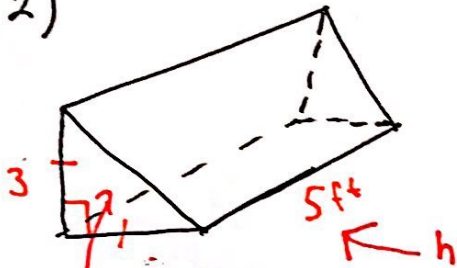
11-4 Note Book Questions

1)



$$\begin{aligned} V &= (L)(w)(h) \\ &= (5)(3)(4) \\ &= (5)(12) \\ &= 60 \text{ ft}^3 \end{aligned}$$

2)



The B is a triangle so,

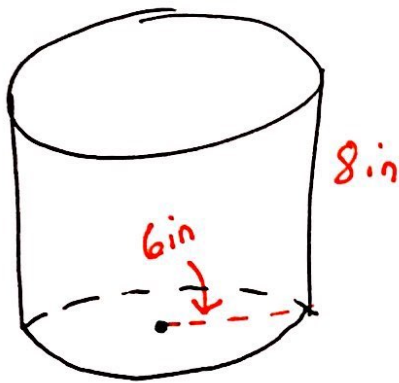
$$B = \frac{9}{2}$$

$$\begin{aligned} V &= B \cdot h \\ &= \left(\frac{9}{2}\right)(5) = \frac{45}{2} = 22.5 \text{ ft}^3 \end{aligned}$$

(tri.) B

$$\hookrightarrow \frac{1}{2}(3)(3) = \frac{1}{2}9 = \frac{9}{2}$$

3)



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

$$r = 6$$

$$h = 8$$

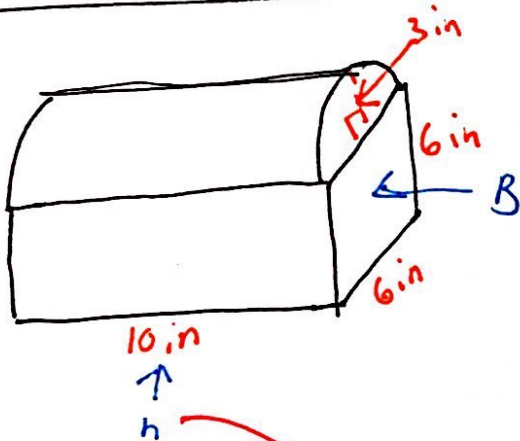
So,

$$V = \pi (6)^2 (8)$$

$$= (36)(8)\pi$$

$$= 288\pi \text{ in}^3$$

4)



We will find the Volume of the rect. prism on the Bottom first.

$$V = (B)(h)$$

$$= (6 \cdot 6)(10)$$

$$= (36)(10)$$

$$= 360 \text{ in}^3$$

Now we find (V) of top Half cylinder. (Same "h")

$$V_{\frac{1}{2}} = \pi (r)^2 (h) / 2$$

$$= \pi (3)^2 (10) / 2$$

$$= \frac{(9)(10)\pi}{2} = \frac{90\pi}{2} = 45\pi$$

So Volume of the figure is

$$V = 360 \text{ in}^3 + 45\pi \text{ in}^3$$

$$\approx 501.37 \text{ in}^3$$