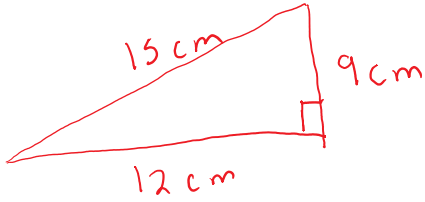


Area & Perimeter

Monday, January 4, 2021 10:12 AM

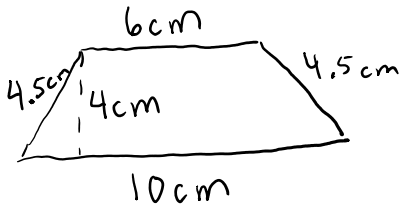
Measure of the total side length

Perimeter: $9\text{ cm} + 12\text{ cm} + 15\text{ cm} = \boxed{36\text{ cm}}$



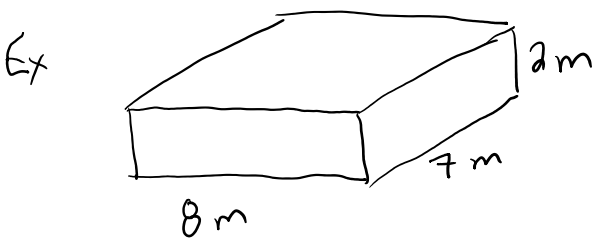
Area: $A_{\Delta} = \frac{bh}{2} = \frac{12\text{ cm} \times 9\text{ cm}}{2} = 54\text{ cm}^2$

↑
space inside the 2D shape



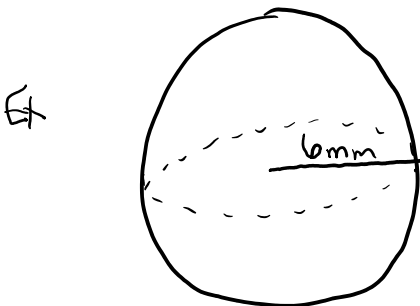
Perimeter: $6\text{ cm} + 4.5\text{ cm} + 4.5\text{ cm} + 10\text{ cm} = 25\text{ cm}$

Area: $A_{\Delta} = \frac{1}{2}(a+b)h$
 $= \frac{1}{2}(6\text{ cm} + 10\text{ cm})4\text{ cm}$
 $= \frac{1}{2}(16\text{ cm})4\text{ cm}$
 $= \boxed{32\text{ cm}^2}$



Surface Area:
 $2 \times [(2\text{ m} \times 7\text{ m}) + (2\text{ m} \times 8\text{ m}) + (7\text{ m} \times 8\text{ m})]$
 $= 2(14\text{ m}^2 + 16\text{ m}^2 + 56\text{ m}^2) = 2(86\text{ m}^2) = 172\text{ m}^2$

Volume: lwh
 $= 7\text{ m} \times 8\text{ m} \times 2\text{ m}$
 $= \boxed{112\text{ m}^3}$



Surface Area: $SA = 4\pi r^2$
 $= 4\pi(6\text{ mm})^2$
 $= 4 \cdot \pi \cdot 36\text{ mm}^2 = \boxed{452.4\text{ mm}^2}$

Volume: $\frac{4}{3}\pi r^3$
 $= \frac{4}{3} \cdot \pi \cdot (6\text{ mm})^3$

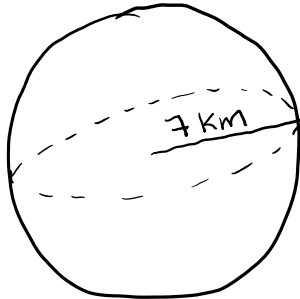
$$\text{Volume} = \frac{4}{3}\pi r^3$$

$$= \frac{4}{3}\pi \cdot (6\text{mm})^3$$

$$= \frac{4}{3}\pi \cdot 216\text{mm}^3$$

$$= \boxed{904.8\text{mm}^3}$$

Ex



$$\text{SA} = 4\pi r^2 = 4 \cdot \pi \cdot 7\text{km}^2$$
$$= 4 \cdot \pi \cdot 49\text{km}^2 = 615.8\text{km}^2$$

$$V = \frac{4}{3}\pi r^3 = \frac{4}{3}\pi \cdot (7\text{km})^3$$

$$= \frac{4}{3}\pi \cdot 343\text{km}^3$$

$$= \boxed{1436.8\text{km}^3}$$