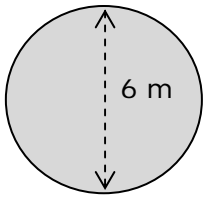


Routine Measurement Practice #5

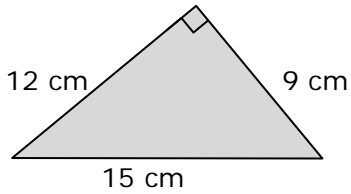
1.



Area =

Perimeter =

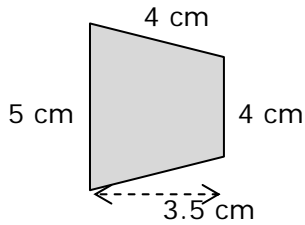
2.



Area =

Perimeter =

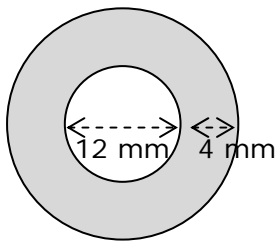
3.



Area =

Perimeter =

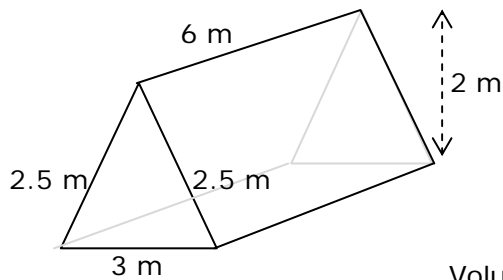
4.



Area =

Perimeter =

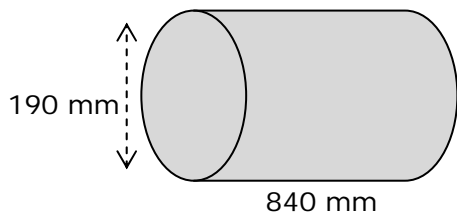
5.



Volume =

Surface Area =

6.



Volume =

Surface Area =

Answers: Routine Measurement Practice #5

Area

Q1 $\pi \times \text{radius}^2$

$$\pi \times 3^2 = 28.27 \text{ m}^2$$

Q2 $\frac{1}{2} \times \text{base} \times \text{height}$

$$\frac{1}{2} \times 12 \times 9 = 54 \text{ cm}^2$$

Q3 average base \times height

$$\frac{4+5}{2} \times 3.5 = 15.75 \text{ cm}^2$$

or

rectangle + triangle



$$(4 \times 3.5) + (\frac{1}{2} \times 1 \times 3.5) = 15.75 \text{ cm}^2$$

Perimeter

$\pi \times \text{diameter}$

$$\pi \times 6 = 18.85 \text{ m}$$

all sides added together

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

all sides added together

$$30 + 24 + 40 + 26 = 120 \text{ cm}$$

Q4 outside circle area – inside circle area

$$\pi \times r^2 - \pi \times r^2$$

$$\pi \times 10^2 - \pi \times 6^2 = 201.06 \text{ mm}^2$$

outside circumference + inside circumference

$$\pi \times d + \pi \times d$$

$$\pi \times 20 + \pi \times 12 = 100.5 \text{ mm}$$

Volume

Q5 base area \times depth

$$(\frac{1}{2} \times b \times h) \times d$$

$$\frac{1}{2} \times 3 \times 2 \times 6 = 18 \text{ m}^3$$

Surface Area

3 rectangle sides + 2 triangle ends

$$(2.5 \times 6) + (2.5 \times 6) + (3 \times 6) +$$

$$+ (\frac{1}{2} \times 3 \times 2) + (\frac{1}{2} \times 3 \times 2)$$

$$= 54 \text{ m}^2$$

Q6 base area \times depth

$$(\pi \times \text{radius}^2) \times d$$

$$\pi \times 95^2 \times 840 = 23,816,000 \text{ mm}^3$$

flat side + 2 round ends

$$(\pi \times d \times h) + (\pi \times r^2) + (\pi \times r^2)$$

$$(\pi \times 180 \times 840) + (\pi \times 95^2) + (\pi \times 95^2)$$

$$= 531,700 \text{ mm}^2$$

Remember to check units as well as the number answer