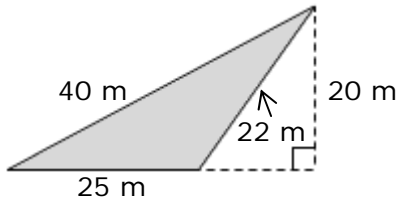


Routine Measurement Practice #3

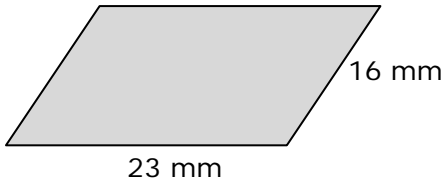
1.



Area =

Perimeter =

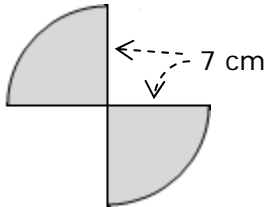
2.



Area =

Perimeter =

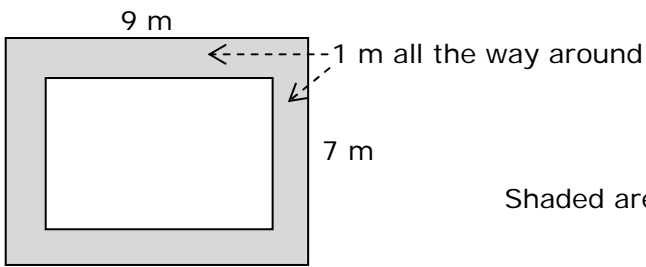
3.



Area =

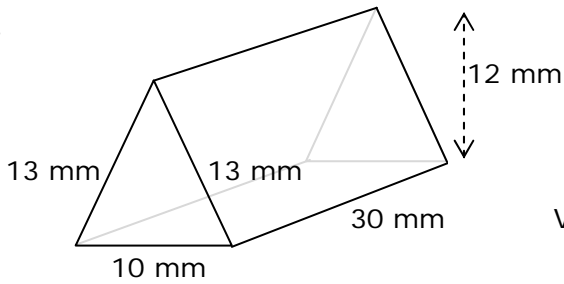
Perimeter =

4.



Shaded area = Edges =

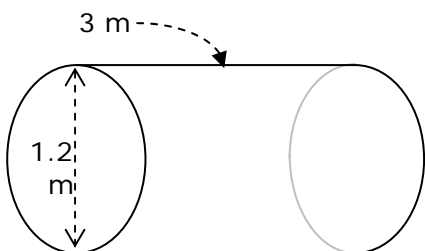
5.



Volume =

Surface area =

6.



Volume =

Surface area =

Answers: Routine Measurement Practice #3

Area

Q1 $\frac{1}{2} \times \text{base} \times \text{height}$

$$\frac{1}{2} \times 25 \times 20 = \mathbf{250 \text{ m}^2}$$

Q2 base \times height (at 90°)

$$23 \times \text{unknown} = \mathbf{\text{can't be found}}$$

Q3 half a full circle

$$\frac{1}{2} \times \pi \times \text{radius}^2$$

$$\frac{1}{2} \times \pi \times 7^2 = \mathbf{76.97 \text{ cm}^2}$$

Q4 subtract inner from outer rectangle

$$(9 \times 7) - (7 \times 5) = \mathbf{28 \text{ m}^2}$$

Perimeter

all sides added together

$$40 + 22 + 25 = \mathbf{87 \text{ m}}$$

all sides added together

$$23 + 16 + 23 + 16 = \mathbf{78 \text{ mm}}$$

half a full circumference + 4 radiuses

$$\frac{1}{2} \times \pi \times \text{diameter} + 4 \times \text{radius}$$

$$(\frac{1}{2} \times \pi \times 14) + 4 \times 7 = \mathbf{49.99 \text{ cm}}$$

all sides added together (inner and outer)

$$9 + 7 + 9 + 7 + 7 + 5 + 7 + 5 = \mathbf{56 \text{ m}}$$

Volume

Q5 base area ($\frac{1}{2} \times \text{base} \times \text{height}$) \times depth

$$\frac{1}{2} \times 10 \times 12 \times 30 = \mathbf{1800 \text{ mm}^3}$$

Q6 base area ($\pi \times \text{radius}^2$) \times depth

$$\pi \times 0.6^2 \times 3 = \mathbf{3.39 \text{ m}^3}$$

Surface Area

three rectangles + two triangles

$$(13 \times 30) + (13 \times 30) + (10 \times 30) + 2 \times (\frac{1}{2} \times 10 \times 12) = \mathbf{1200 \text{ mm}^2}$$

two bases + one side (perimeter \times depth)

$$2 \times (\pi \times 0.6^2) + (\pi \times 1.2) \times 3 = \mathbf{13.57 \text{ m}^2}$$

Remember to check units as well as the number answer