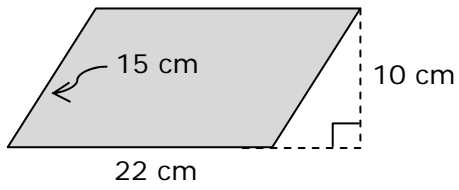


Routine Measurement Practice #1

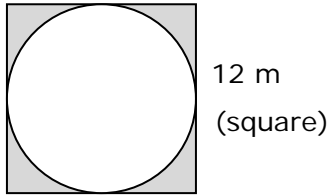
1.



Area =

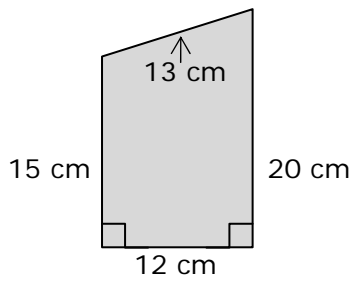
Perimeter =

2.



Shaded area = Perimeter =

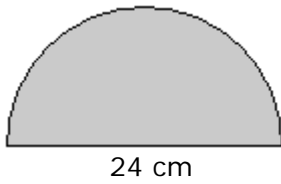
3.



Area =

Perimeter =

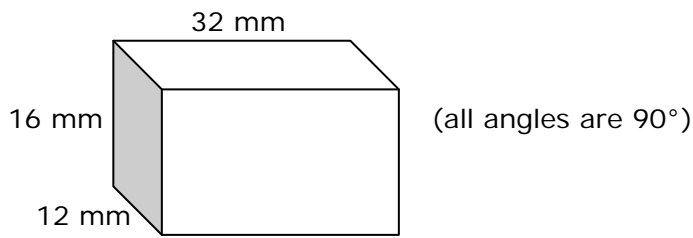
4.



Area =

Perimeter =

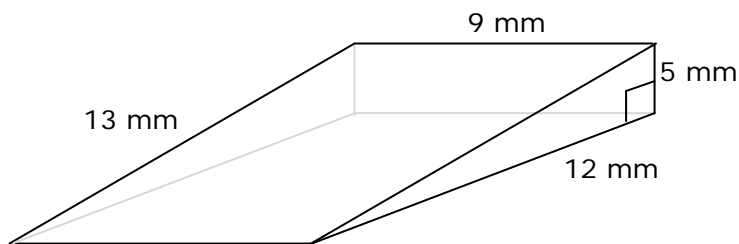
5.



Volume =

Surface Area =

6.



Volume =

Surface Area =

Answers: Routine Measurement Practice #1

Area

Q1 base \times height

$$22 \times 10 = \mathbf{220 \text{ cm}^2}$$

Q2 base \times height $- \pi \times \text{radius}^2$

$$(12 \times 12) - (\pi \times 6^2) = \mathbf{30.90 \text{ m}^2}$$

Q3 average base \times height

$$\frac{15+20}{2} \times 12 = \mathbf{210 \text{ cm}^2}$$

or

rectangle + triangle



$$(15 \times 12) + (\frac{1}{2} \times 5 \times 12) = \mathbf{210 \text{ cm}^2}$$

Q4 half circle = $\frac{1}{2} \times \pi \times r^2$

$$\frac{1}{2} \times \pi \times 12^2 = \mathbf{226.2 \text{ cm}^2}$$

Perimeter

all sides added together

$$22 + 15 + 22 + 15 = \mathbf{74 \text{ cm}}$$

square = $12 \times 4 = 48 \text{ m}$

circle = $\pi \times 12 = 37.7 \text{ m}$

total = $\mathbf{85.7 \text{ m}}$

all sides added together

$$15 + 12 + 20 + 13 = \mathbf{60 \text{ cm}}$$

half circle + side = $(\frac{1}{2} \times \pi \times d) + d$

$$\frac{1}{2} \times \pi \times 24 + 24 = \mathbf{61.7 \text{ cm}}$$

Volume

Q5 base \times height \times depth

$$12 \times 16 \times 32 = \mathbf{6,144 \text{ mm}^3}$$

Surface Area

6 sides, all base \times height

$$(12 \times 16) + (12 \times 32) + (16 \times 32) + (12 \times 16) + (12 \times 32) + (16 \times 32) = \mathbf{2,176 \text{ mm}^2}$$

Q6 base area $(\frac{1}{2} \times \text{base} \times \text{height}) \times \text{depth}$

$$\frac{1}{2} \times 12 \times 5 \times 9 = \mathbf{270 \text{ mm}^3}$$

three rectangles + two triangles

$$(5 \times 9) + (12 \times 9) + (13 \times 9) + 2 \times (\frac{1}{2} \times 12 \times 5) = \mathbf{330 \text{ mm}^2}$$

Remember to check units as well as the number answer