

SURFACE AREA OF PRISMS

SKILLS QUESTIONS

Q1. Calculate the surface area of a cube with a side length of:

- (a) 3 cm
- (b) 6.8 m
- (c) $3\frac{1}{4}$ m



Q2. Calculate the surface area of the rectangular prism shown below. The dimensions are 20cm wide, 30cm long and 10cm high. Do not include overlaps. (Hint: Draw a net.)

Q3. Complete the table of surface areas for these rectangular prisms.

	Length	Width	Height	SA of Rectangular Prism
(a)	30 cm	25 cm	8 cm	
(b)	$15\frac{1}{2}$ cm	$12\frac{1}{4}$ cm	46 cm	
(c)	4.3 mm	5.2 mm	9.2 mm	
(d)	150 cm	1.2 m	0.8 m	
(e)	34 m	5 m	0.05 km	

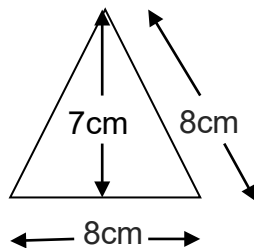
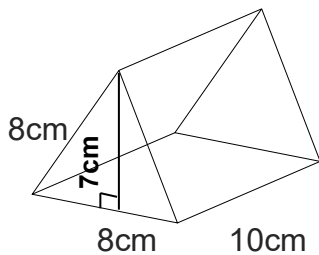
Q4. Calculate the amount of plastic (surface area) of the cylinder shown below. Its diameter is 30 cm and its height is 40 cm. There is no lid. (Hint: Draw a net.)

Q5. Calculate the area of metal (surface area) of this closed soda can. Its diameter is 8 cm and its height is 13 cm. (Hint: Draw a net.)

Q6. Complete the table of surface areas (in cm^2) for these closed cylinders.

	Diameter	Height	Radius	Circumference	SA
(a)	10 cm	15 cm			
(b)	20 cm	35 cm			
(c)	2.6 cm	5.3 cm			
(d)	$2\frac{1}{8}$ cm	$4\frac{3}{4}$ cm			
(e)	120 cm	3.4 m			

Q7. Calculate the surface area of the triangular prism shown below.



ANSWERS

Q1. (a) 54cm^2
(b) 277.44m^2
(c) 63.38m^2

Q2. 2200cm^2

Q3. (a) 2380cm^2
(b) 2932.75cm^2
(c) 219.52mm^2
(d) 79200cm^2
(e) 4240m^2

Q4. 4474.5cm^2

Q5. 427.04cm^2

Q6. (a) 628
(b) 2826
(c) 53.88
(d) 38.78
(e) 150720

Q7. 296cm^2