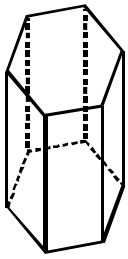
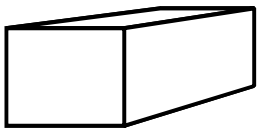
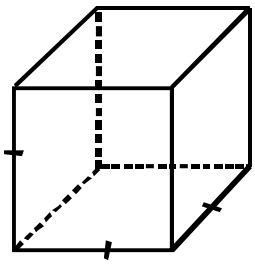
Exercise 2015-8ℰQ-00006(1)

(1) Classify each of the following polyhedrons. Use the words in the word bank.

Hexahedron	Triangular prisms	Octahedron
Cone	Rectangular pyramid	Tetrahedron
Rectangular prisms		

(a) 

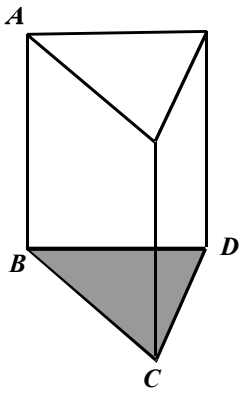
(b) 

(c) 

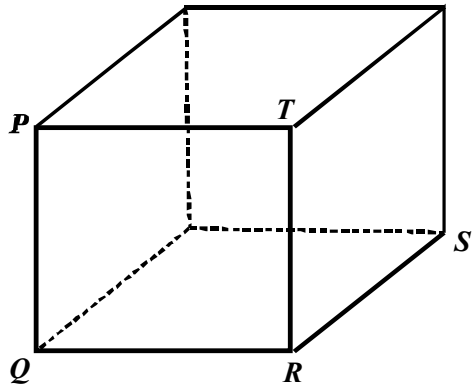
(2) Convert the following to the given units in brackets:

(a) 3 000 mm³ (liter)
(b) 0,1 cm² (mm²)
(c) 1,345 mm² (cm²)
(d) 1,3 ha (m²)
(e) 33 m³ (cm³)
(f) 1 mm³ (m³)

(3) Calculate the surface area of the following, correct to 2 dec:
Give the answer in cm².

(a) 

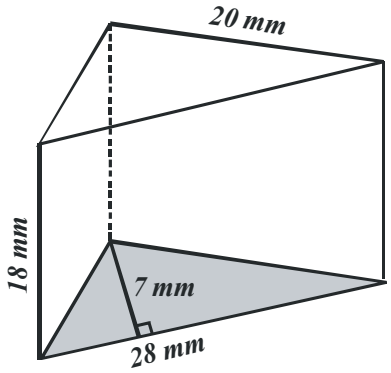
AB = 116 cm, BC = 83 cm,
CD = 77 cm and BD = 85 cm.
Area ΔBCD = 1 763,75 cm².

(b) 

PQ = 267 mm, QR = 282 mm
and RS = 31 cm.

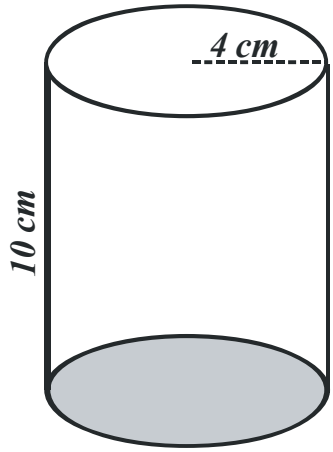
(4) Calculate the volume, correct to 2 dec, of each of the following.
Also give the volume in cm³.

(a)



(b) AB = 3,2 m and AD = 40 cm

(5) Cans with dimensions as in the sketch, are manufactured from tin. The cans are open on the upper side. Round off correct to the nearest integer.



(a) Calculate the surface area of the can.
(b) Calculate the volume of the can in cm³.
(c) If 1 litre = 1 000 cm³, calculate how many ml of water is needed to fill the can.

(6) Match the two columns:

	Column A			Column B
(a)	Hexahedron		M	All 8 faces are equilateral triangles
(b)	Polyhedron		N	Multiple faces
(c)	Octahedron		P	All 4 faces are equilateral triangles
(d)	Tetrahedron		Q	Cube