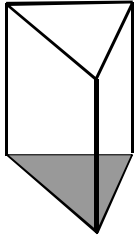


Worksheet 2015-8EQ-00004(1)

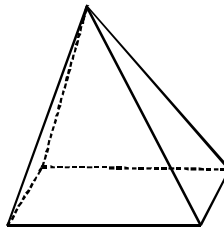
(1) Classify each of the following polyhedrons. Use the words in the word bank.

Cube	Triangular prisms	Sphere
Cone	Rectangular pyramid	Tetrahedron
Rectangular prisms		

(a)



(b)



(c)



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

(a) 32 cm^2 (m^2)

(d) 4 liter (cm^3)

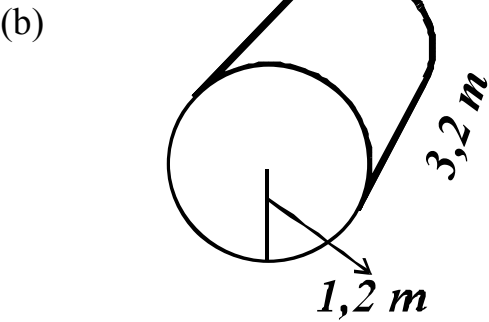
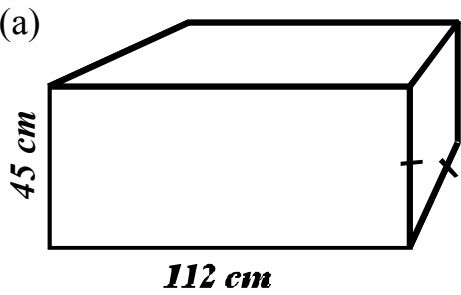
(b) $1\,000 \text{ km}^2$ (m^2)

(e) 26 ha (m^2)

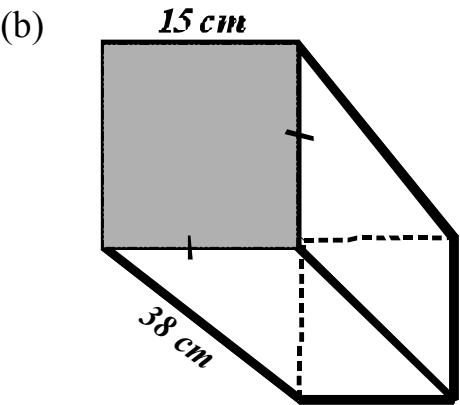
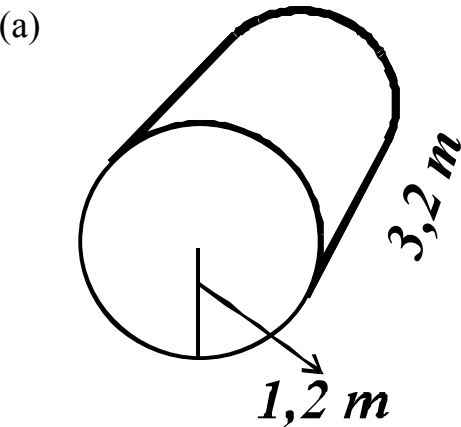
(c) $1,345 \text{ mm}^3$ (cm^3)

(f) 3 m^3 (mm^3)

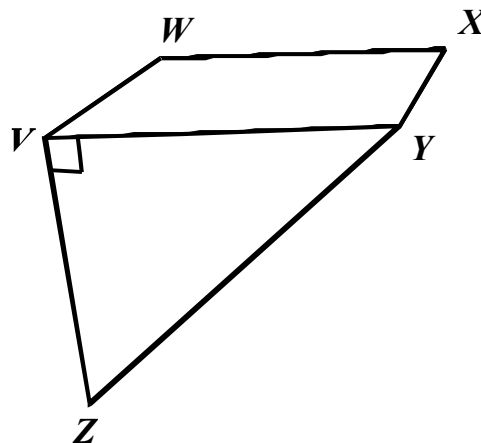
(3) Calculate the surface area of the following, correct to 2 dec:



(4) Calculate the volume, correct to the nearest integer, of each of the following.
Give the volume in cm^3 .



- (5) A triangular prism, as in the sketch,
is cut from wood.
 $VW = 10$ cm, $VY = 80$ cm and $VZ = 60$ cm.



- (a) Calculate the length of YZ .
- (b) Calculate the volume of wood the prism takes up in cm^3 .
- (c) Calculate the volume of wood the prism takes up in m^3 .
- (d) Calculate the total surface area of the prism in mm^2 .
- (e) If the prism is evenly divided into five smaller triangular prisms, answer the following questions:
- (i) Each one of the smaller triangular prisms will be congruent to:
 $\triangle VWY$ or $\triangle VZY$ or $\triangle WXY$
- (ii) Determine the volume of each of the smaller triangular prisms.
- (iii) Will the ratio between the volume of the original prism and the volume of one of the five smaller triangular prisms be equal to the ratio between the height of the original prism and the height of one of the smaller triangular prisms?

[illegible]

