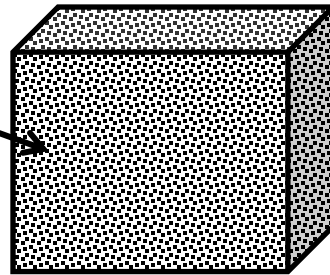
	NAME:				
	Gr 7		Date:		Time 45 mins
CAPS Reference	4-2 Surface Area and Volume of 3D objects				
Topic	4-2-1 Surface Area – How it is measured?				



1. Think First! [10 mins]

Look at this picture of a gift box.

The flat patterned parts are called the faces of the box.



The solid black lines are called the edges of the box.

The “corner” where three edges meet is called a vertex. (Plural vertices; said “vertissies”.)

- 1.1 What would the box look like if we cut it open and laid it flat?
- 1.2 Draw a diagram of what you think it would look like.
- 1.3 Are there any faces that are the same size and shape?
- 1.4 How would you find the area of all the faces together?

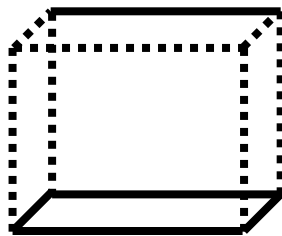


2. Got it? [10 mins]

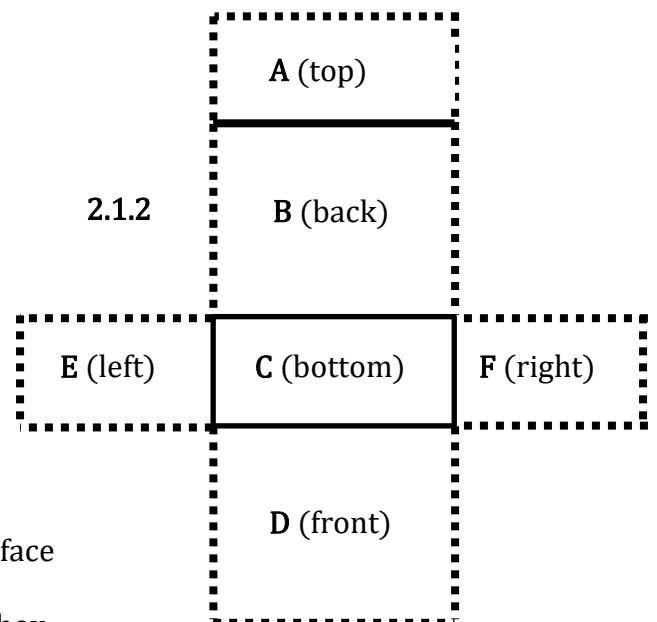
2.1 Take a box and mark on the edges solid and dotted lines as in diagram (2.1.1).

2.2 Cut along the dotted lines. Place the box flat. diagram (2.1.2)

2.1.1



2.1.2



2.3 A (top) and C (bottom) are the same size and shape.
B (back) and D (front) are the same size and shape.
E (left) and F (right) are the same size and shape.

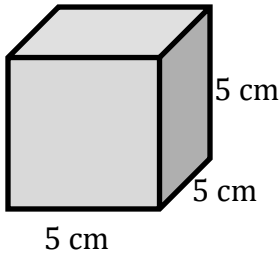
2.4 To find the area, find the area of each face and add them together.
This is called the **surface area** of the box.
The diagram is called the **net** of the shape.



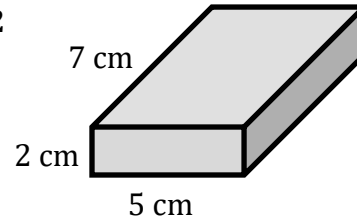
3. Go ahead! [15 mins]

3.1 Draw a diagram of the net of each of the following shapes. Write the measurements of the shape on your diagram.

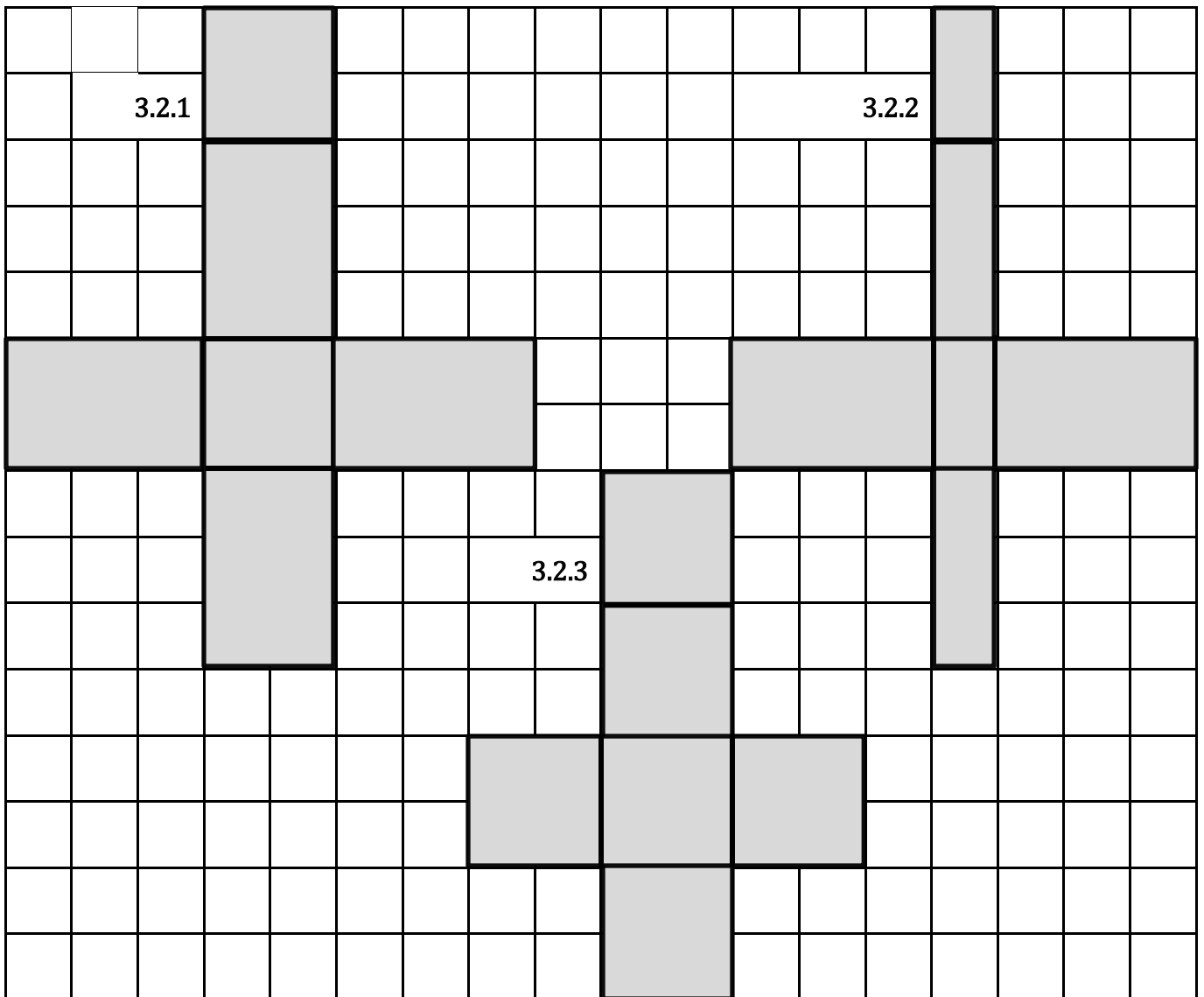
3.1.1



3.1.2



3.2 Calculate the surface area of each of the following opened out boxes:



4. Check your work! [10 mins]