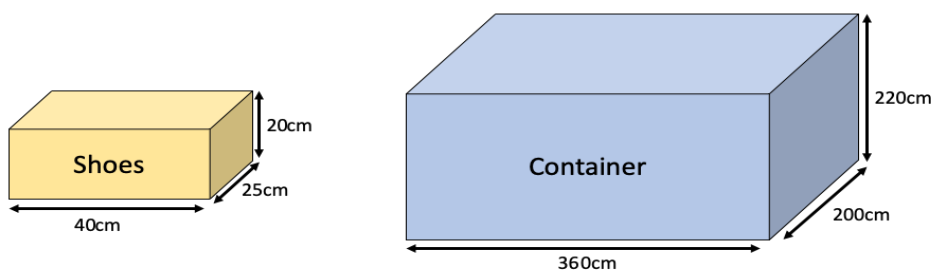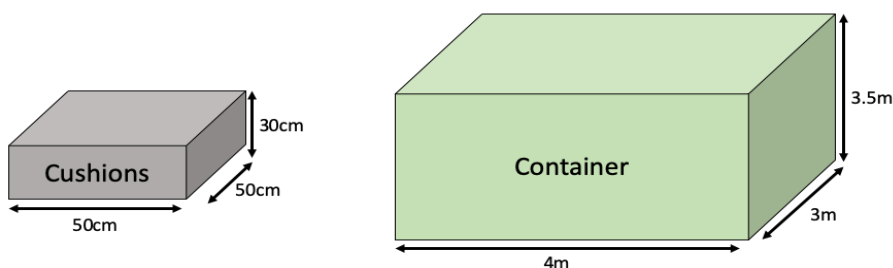## Container Packing

1.   In a shop shelves measure 120cm by 80cm. How many tins of beans of which have a diameter of 18cm could you stack on the shelf, without having anything hang over the edge.

2.   Shoe boxes are being put into a larger container. The dimensions of the boxes are listed below. Given that all the boxes must be stacked in the same way, what is the maximum number of boxes you can fit into the container?

3.   Boxes of cushions are being stacked into containers. Given all the cushions must be stacked in the same way.
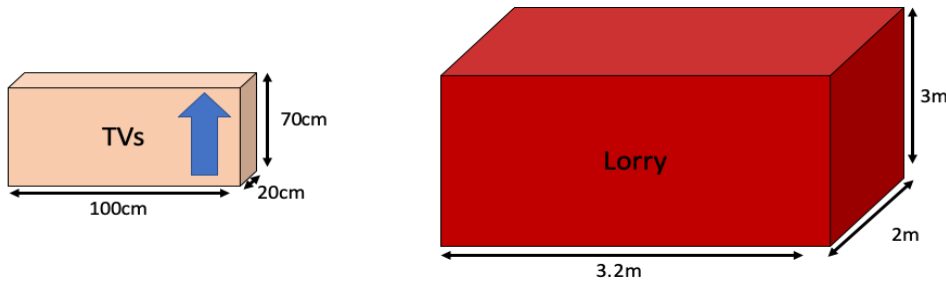
a) What is the maximum number of boxes you can fit into the container?

b) Given that it costs £1.95 to pack each box of cushions away and £800,
calculate the total cost of packing all the containers

4.   TVs are being stacked into the back of a lorry. The TVs must be put in the lorry the right way up to stop them from getting damaged. The dimensions of the boxes and the lorry are below.
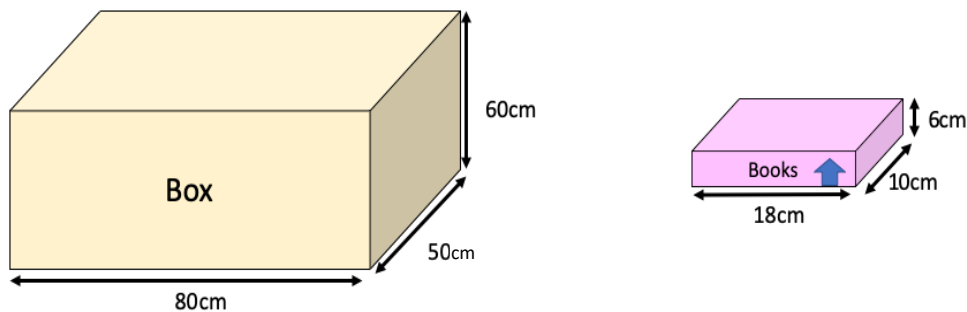
a) What is the maximum number of TVs you can fit in the lorry?

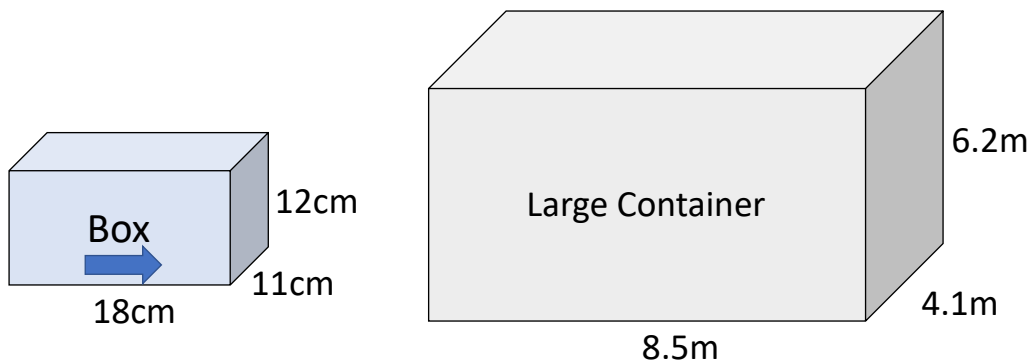TVs
70cm
100cm
20cm

Lorry
3m
2m
3.2m

b) It costs £2.85 to correctly package each of the TV. Given that it costs £2980 to pack and ship the container what is the total cost of shipping per TV.

5.   Books are being packed away. It is important that the cover is face up in the box in order to maintain their condition.

What is the maximum number of books you can fit in the box?

Box
60cm
50cm
80cm

Books
6cm
10cm
18cm

6.   a) What is the maximum number of boxes that you can fit inside the larger container. The Boxes must be stacked the correct way.

Box
12cm
11cm
18cm

Large Container
6.2m
4.1m
8.5m

b) It takes 1 hour for a machine to put 10000 boxes into the container, after how many hours will all of the boxes be put into the container?

7.   Oil is being placed into a container in cylindrical tanks. The tanks much be stacked upwards. What is the maximum number you can fit in the container?