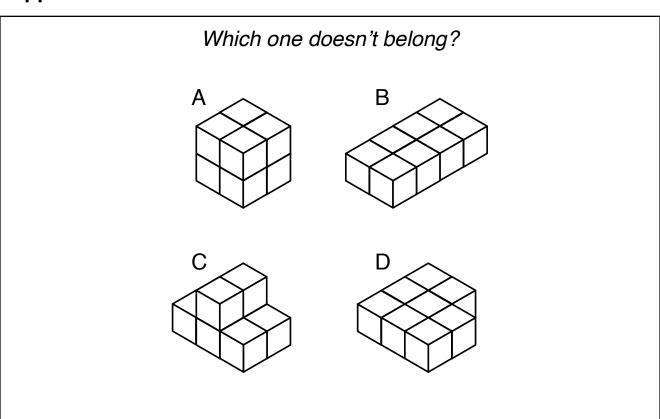
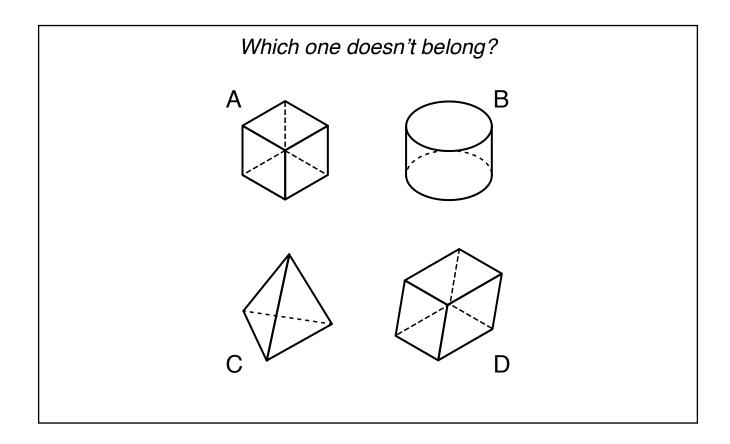
Team names:	

## **Application Exercise 1**





Team names:	

## **Application Exercise 2**

Photo: timber frame of an office built in a garage.

What questions come to mind?



The office dimensions are  $4 \times 2 \times 2.2$  m (length  $\times$  width  $\times$  height). Three walls were built next to the existing garage wall. All the materials were ordered and delivered before construction started. How many metres of timber would be required for the walls?

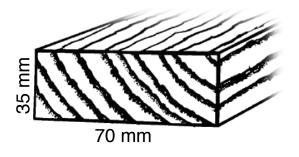
What are your estimates for the length of timber?

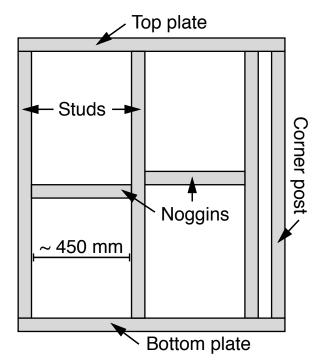
What numbers would be too high?

Too low?

What other information would be useful?

This timber frame construction uses stud walls, as shown. The different parts are cut to length and nailed together to form the frame.





Next, plaster sheets, insulation and electrical work are installed before painting.

How many metres of timber would be required for the walls?

- (A) 68.4 m
- (B)  $17 \times 4.2 \text{ m}$
- (C) 75.6 m
- (D)  $20 \times 4.2 \text{ m}$

How will you organise your working out?