

No Calculators permitted and working must be shown.**Essential knowledge:**

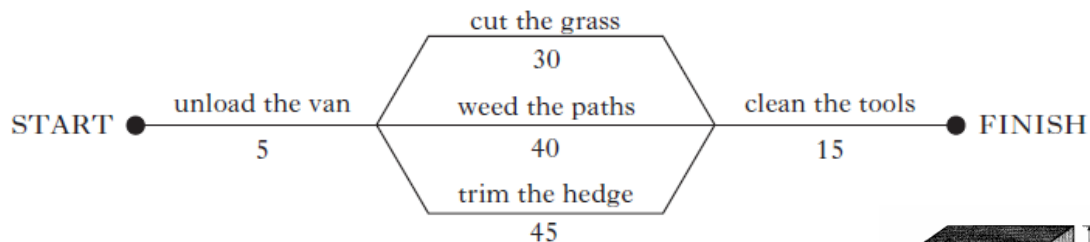
1. (a) Place the following statements in the best order for going to London from Edinburgh by car:



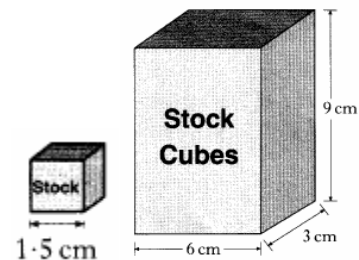
- Leave Edinburgh
- Check car for oil, water and fuel
- Plan the route
- Arrive in London
- Stop for a rest and to refuel

(b) Which 2 statements could be switched and still give the same result?

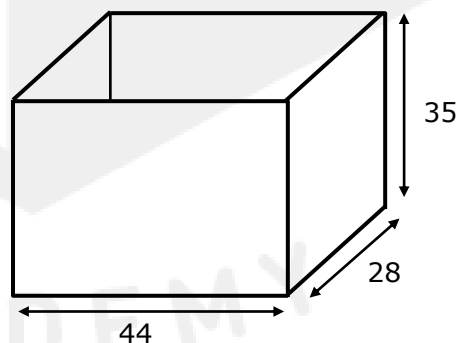
2. The network diagram shows the time it took a squad of gardeners to do the garden of one of their customers. All times are in minutes. How long did it take altogether to do the garden from start to finish?



3. Stock cubes are sold in boxes. The edge of one stock cube measures 1.5cm. How many stock cubes are needed to fill the box?

**Unit level:**

4. Baked beans come in cylindrical tins 11cm high and diameter 7cm. The tins are packed into boxes 44cm by 28cm by 35cm.



The tins can be stacked in the box 3 different ways. Calculate how many tins can fit in the box using each possibility.

5. You are making lunch for yourself and decide on this list of things to be done:

- A. Toast a slice of bread in the toaster.
- B. Butter both slices of toast.
- C. Heat spaghetti in a saucepan.
- D. Put spaghetti onto buttered toast
- E. Pour a glass of milk
- F. Eat lunch



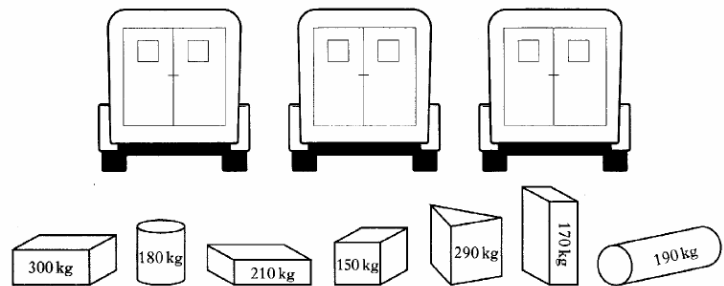
Order of activities	Activities that could be done at the same time

Copy and complete the precedence table above by putting the activities into a logical order and when two activities could be done at the same time, put the second activity in the right-hand column.

Assessment level:

6. The 7 boxes shown have to be loaded into 3 vans.

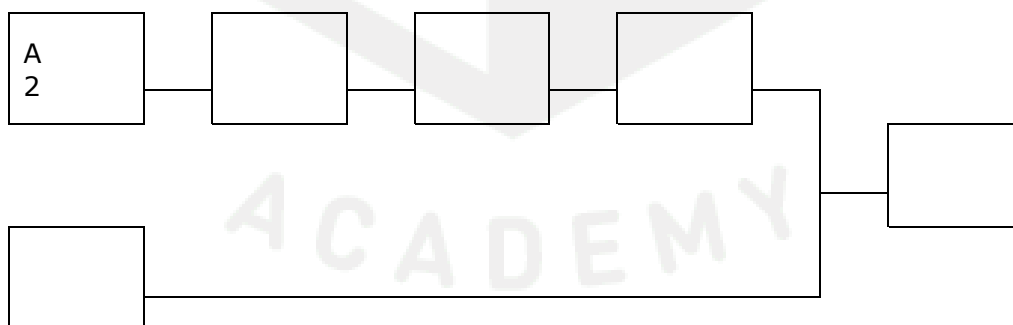
Each van can carry no more than 500kg.
Show a way of loading all the boxes into the 3 vans.



7. Rebecca and her friend are planning to decorate Rebecca's room with new furniture. The table lists the tasks they must carry out:

Task	Description	Preceding Task	Time
A	Remove old furniture and carpet	-	2
B	Paint the woodwork	A	2
C	Hang the wall paper	A, B	6
D	Lay the carpet	A, B, C	2
E	Assemble new furniture	-	4
F	Place furniture in room	A, B, C, D, E	1

Copy and complete the diagram by writing these tasks and times in the boxes.



Rebecca thinks that they can complete the job in 12 hours.
Is she correct? Give a reason for your answer.

CUMBERNAULD



ACADEMY