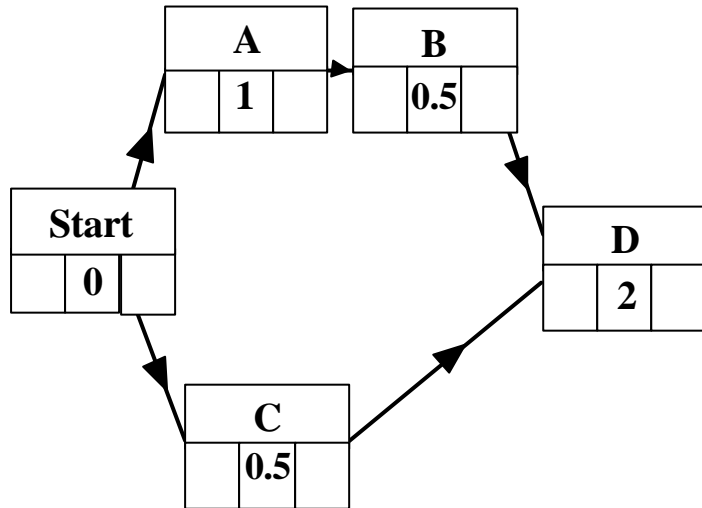


Task 2

The activity network below shows activities A, B, C and D.
Use your table to complete this activity network.



Task 3

Carry out a **forward pass** to find the **earliest possible start time** for each activity.

Task 4

Carry out a **reverse pass** to find the **latest possible finish time** for each activity.



Teacher Notes

Unit Advanced Level, Using and applying decision mathematics

Notes on Activity

It is intended that this activity is used to introduce critical path analysis.

The first slide of the Powerpoint presentation can be used to introduce the scenario. After showing activities A to D in the table, students can be given page 1 and asked to complete Task 1. You could then use the rest of slide 1 to show one possible way of completing the table.

Then give students a copy of slide 1 so that they can follow slide 2 which shows how to draw and use an activity network to find a critical path. Students can then be asked to complete Tasks 2 to 4 on page 2, using the activities they had suggested in Task 1 (i.e. using the table they completed on page 1).

Slide 3 in the Powerpoint presentation lists the main steps in the method for finding a critical path

Students should be given a copy of slide 2 (the activity network) before you show them slide 4 which lists the critical activities and their starting times. The other activities are shown on slide 5 together with their floats. Students can then be asked to use their own activity networks to complete Tasks 5 and 6.

Note you should also discuss other points such as how the time required will depend on how many helpers there are and the need for at least one helper to allow some of the activities to occur simultaneously. There are also other practical considerations such as whether or not it is feasible to do all of the work in one day, how best to fit in time for eating and sleeping and so on.

