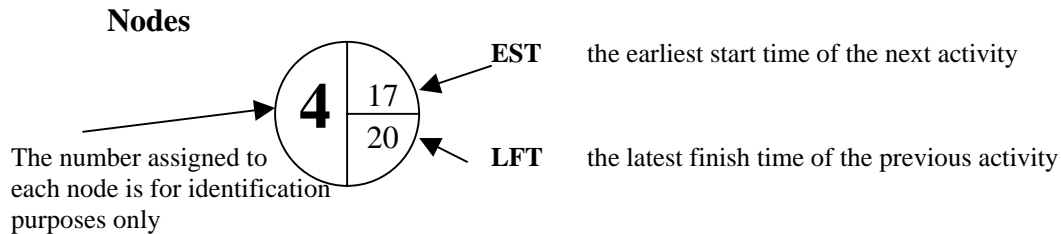
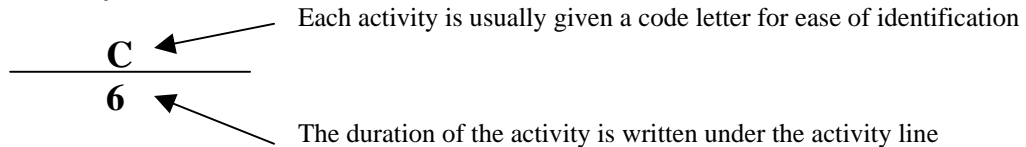


- ❖ identify all activities that form part of the project
- ❖ estimate how long (the duration) of each activity
- ❖ determine the relationship between the various activities; are these tasks
 - dependent on each other Activity B can only start once A is complete
 - independent Activity P can happen at the same time as Q (parallel activities)

Next a **network** is drawn, containing **nodes** and **activity lines**.



Activity Lines



Rules for constructing a network

- o There can be only one **start node** and one **finish node**
- o **Activity lines** must go from a **node** to another **node**; they cannot ‘hang’
- o **Activity lines** should never cross
- o Label everything
- o Once the critical path has been identified, mark it with two short lines through each critical activity line

- Hints
- when drawing a **network**, do not add an **end node** on an **activity line** until you are sure what comes next
 - a rough draft at a **network** is always a good idea (you are almost certain to make a mistake somewhere)

- Earliest Start Times**
- the earliest possible time that any particular activity can start, assuming that all previous activities are completed on schedule
 - calculated by taking the **EST** of the previous activity and then adding the **duration** of that activity
 - if two activities lead into the same **node**, and therefore there are two possible **ESTs**, take the larger of the two

Hint – when filling in ESTs, start at Node 1 (**start node**) and then work left to right

- Latest Finish Times**
- the latest time that an activity can finish without delaying the whole project
 - calculated by subtracting the duration of the next activity from the **LFT** of that activity
 - where two activities come from the same node therefore there are two possible **LFTs**, take the smaller value of the two values