

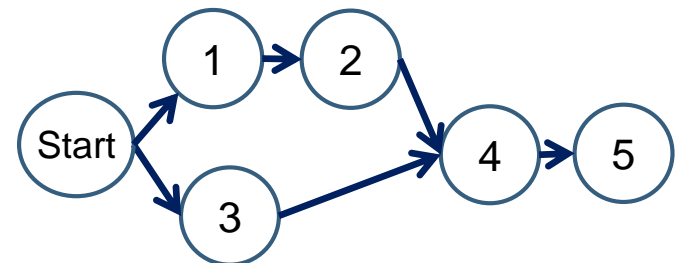
Home assignment - PERT

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- Referring to our “Prepare foundation form work” work package with the following dependencies:

- 1) Extract foundation sizes from drawings (1 engineer)
- 2) Order form sheets (1 purchaser)
- 3) Hire form-workers for the job(1 HR-person)
- 4) Size form sheets (2 form-worker)
- 5) Install form sheets in place (2 form-worker)



- Activity durations are provided according to the information collected:

Activity	Duration
1	2 days
2	Min=4 h; Max= 7 h
3	Min= 6 h; Max= 9h; Most likely = 7 h
4	Optimistic = 10 m ² /ManH; Pessimistic = 5 m ² /ManH; Most likely = 8 m ² /ManH
5	Refer to the historical data from past jobs

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Suppose we have a 3000 m² foundation job and we are going to hire total 3 form worker for the job! The starting date is Dec 6th and our working week is from Saturday to Wednesday, 8 hours in each day. Site is closed on statutory holidays.

- 1- Visualize historical data provided for activity 5 (Install form-sheets in place)! (20% mark)
- 2- Calculate mean and standard deviation of the historical data! (10% mark)
- 3- Do CPM calculations! (15% mark)
- 4- Present the schedule on MSP! (15% mark)
- 5- With 90% level of confidence calculate the work package duration. (20% mark)
- 6- What is the chance that this work package is done before January ends? (20% mark)

(Due: 1 week)