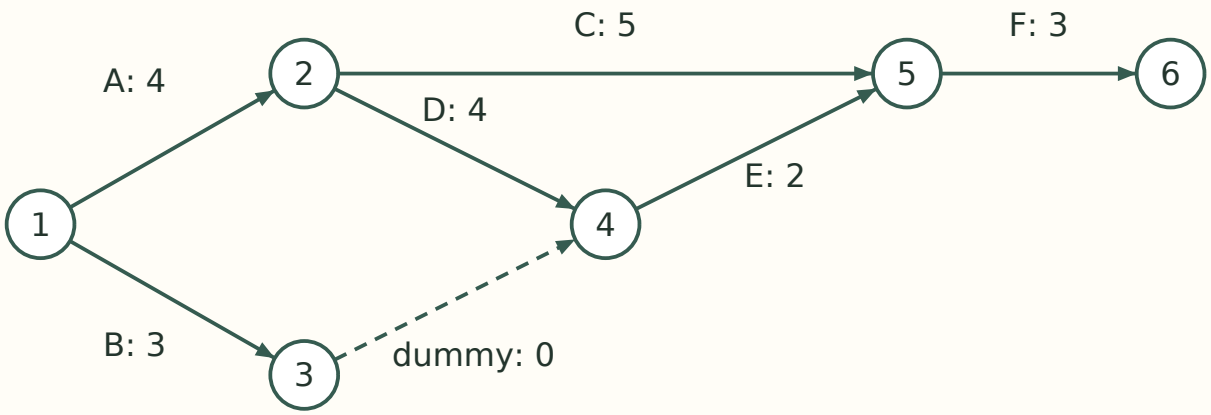
Practice worksheet | Networks, scheduling and assignment

Slack and changes to activities

Name: _____ Date: _____

6 questions | 17 marks

1. Calculate the total floats of B and C in the display project. [3 marks]



Activity-on-arrow network; durations are in days.

2. Increase B's duration in the display project from 3 to 7 days. Find the project finish.
[3 marks]

A school display project. Times are in days.

Activity	Duration	Immediate predecessors
A	4	None
B	3	None
C	5	A
D	4	A
E	2	B and D
F	3	C and E

3. Increase B's duration instead to 9 days. Find the finish and critical real-activity sequence. [3 marks]

A school display project. Times are in days.

Activity	Duration	Immediate predecessors
A	4	None
B	3	None
C	5	A
D	4	A
E	2	B and D
F	3	C and E

4. Activity P has $\mathrm{ES} = 6$, $\mathrm{EF} = 10$, $\mathrm{LS} = 9$ and $\mathrm{LF} = 13$. Find its duration and float. [2 marks]

5. A non-critical route takes 12 hours and the project finishes in 16. Two consecutive tasks on that route are both extended by 3 hours. What happens? [3 marks]

6. The project deadline is fixed at day 20, but its earliest completion is day 18. Explain why a backward scan using 20 answers a different question from one using 18. [3 marks]