Practice worksheet | Networks, scheduling and assignment

Rectangular tables and dummy rows/columns

Name: _____ Date: _____

6 questions | 15 marks

1. Add the correct type and number of dummy entries to a 4-worker/3-job table with free idling. [2 marks]

2. Solve the displayed four-worker problem and state who is idle. [3 marks]

Costs ($) for four workers and three required jobs. A worker may remain idle at no cost.

Worker	Job 1	Job 2	Job 3
A	4	8	7
B	6	3	8
C	5	7	2
D	9	4	6

3. Two workers must each do exactly one job, but there are three compulsory jobs. Can a dummy row alone make all three jobs physically complete? [2 marks]

4. Using the penalty table, find the total for A→3, B→1 and job 2 left unfilled. [2 marks]

Costs ($) for two workers and three jobs, with stated unfilled-job penalties.

Resource	Job 1	Job 2	Job 3
A	6	4	8
B	5	7	3
Unfilled-job penalty	10	2	7

5. Using the penalty table, compare all six assignments and give the minimum. [4 marks]

Costs ($) for two workers and three jobs, with stated unfilled-job penalties.

Resource	Job 1	Job 2	Job 3
A	6	4	8
B	5	7	3
Unfilled-job penalty	10	2	7

6. Four workers cover three jobs. Idle-worker costs are A:$2, B:$1, C:$4 and D:$3. What should the dummy job column contain? [2 marks]