Practice worksheet | Matrices and networks

Reading directed/weighted networks

Name: _____ Date: _____

6 questions | 12 marks

1. A→B takes 5 min, B→C takes 4 min, A→C takes 12 min. Find the A→B→C journey time. [2 marks]

2. The only edges are A→B, B→C and A→C. Is C→B→A permitted? [2 marks]

3. P→Q has capacity 8 vehicles/min. Interpret this label. [2 marks]

4. An undirected edge X-Y weighs 7 km. Find the length X→Y→X when repetition is permitted. [2 marks]

5. A→B costs 4 dollars while B→A costs 6 dollars. Explain why one undirected weight is unsuitable. [2 marks]

6. Why must a missing connection not be recorded as a zero-weight available edge? [2 marks]