Practice worksheet | Matrices and networks

Matrix arithmetic

Name: _____ Date: _____

6 questions | 12 marks

1. Find $A - B$ for $A = \begin{pmatrix} 2 & -1 \\ 3 & 4 \end{pmatrix}$ and $B = \begin{pmatrix} 5 & 2 \\ -2 & 1 \end{pmatrix}$. [2 marks]

2. Find $2A - B$ for $A = \begin{pmatrix} 2 & -1 \\ 3 & 4 \end{pmatrix}$ and $B = \begin{pmatrix} 5 & 2 \\ -2 & 1 \end{pmatrix}$. [2 marks]

3. Calculate $3\begin{pmatrix} 1 & 0 \\ -2 & 4 \end{pmatrix}$. [2 marks]

4. Why cannot a 2×3 matrix be added to a 3×2 matrix? [2 marks]

5. Find X if $A + X = B$, $A = \begin{pmatrix} 1 & 3 \\ 2 & 4 \end{pmatrix}$ and $B = \begin{pmatrix} 6 & 5 \\ 1 & 9 \end{pmatrix}$. [2 marks]

6. Should a ticket-count matrix be added to a same-order price matrix to find revenue? [2 marks]