Practice worksheet | Matrix models

# Matrix arithmetic revision

Name: _____ Date: _____

6 questions | 23 marks

**1.** For rows $A$: $(2,-1),(3,4)$, and $B$: $(1,5),(-2,0)$, find $2A-B$. [3 marks]

**2.** For rows $A$: $(1,2,0),(-1,3,2)$, and column $b=(4,1,2)$, find $Ab$. [3 marks]

**3.** Let $A$ have rows $(1,1),(0,1)$ and $B$ have rows $(2,0),(1,3)$. [6 marks]

**(a)** Find $AB$. [3 marks]

**(b)** Find $BA$ and compare. [3 marks]

**4.** A $4 \times 3$ matrix multiplies a $3 \times 2$ matrix. State the result order. Is the reverse product defined? [3 marks]

**5.** Equal matrices have rows $(x+2, 5), (4, y-1)$ and $(9, 5), (4, 6)$. Find $x, y$. [3 marks]

**6.** A bakery sells muffins at AUD 3 and rolls at AUD 2. Branch X sells (12,20); Y sells (8,30). [5 marks]

**(a)** State the sales-matrix and price-column orders. [2 marks]

**(b)** Find and interpret the income column. [3 marks]