

School of Mathematics and Statistics  
MAST30030  
Applied Mathematical Modelling

**Problem Sheet 5. Some answers**

**Question 1**

i and v make sense

**Question 2**

By splitting into 3 terms and relabelling the dummy indices, each term is the same; so simplifies to

$$= 3A_{ijk}x_i x_j x_k$$

**Question 4**

i and iii are false; rest are true.

**Question 6**

i. 3

ii. 3

iii. 3

iv. 6