

## **0.1 Determinants of 2x2 and 3x3 matrices**

### **0.1.1 The determinant of a 2x2 matrix**

$$M = \begin{bmatrix} a & b \\ c & d \end{bmatrix}$$

$$|M| = ad - bc$$

### **0.1.2 The determinant of a 3x3 matrix**

$$M = \begin{bmatrix} a & b & c \\ d & e & f \\ g & h & i \end{bmatrix}$$

$$|M| = aei + bfg + cdh - ceg - dbi - afh$$