1 Basic Mathematics

This session covers typesetting mathematics in LaTeX. This text contains two mathematical expressions: $2^2 + 2^2 = 8$ and $2 \times 2 = 4$

$$\cos^2 \theta + \sin^2 \theta = 1$$

The union of two sets A and B is denoted as $A \cup B = \{x \in A \text{ or } x \in B\}$

We are learning fractions $\frac{a}{\frac{b}{c}} \times \frac{\frac{d}{e}}{f} \geq 1$ which is good.

$$\frac{a}{\frac{b}{c}} \times \frac{\frac{d}{e}}{f} \geq 1$$

$$\left\{ \left(\frac{a}{b} \right) + \left(\frac{c}{d} \right) \right\}$$

$$\sum_{i=a}^{b} g(i) = 0, \text{for } b < a$$

$$\sum_{i=1}^{n} i = \frac{n(n+1)}{2}$$