1 Basic Mathematics

This session covers type setting mathematics in LaTeX. This text contains two mathematical expressions:

$$\mu\Phi\Phi\Psi$$
 $2^2 + 2^2 = 8$ 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 $\frac{a}{\frac{b}{b}} \times \frac{\frac{d}{e}}{f} \ge 1$ which is good.

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

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

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

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