

basic operators

set operators





...more on this in your tutorial

basic operators

- addition +
- subtraction –
- multiplication ×
- division. ÷
- exponentiation x^a
- nth root $\sqrt[n]{x}$
- factorial !
- sum $\sum_{i} x_{i}$
- product $\prod_{i} x_{i}$

set operators

- ullet difference A ackslash B
- complement $A' \operatorname{or} A^c \operatorname{or} \bar{A}$ or $\neg A$
- intersection $A \cap B$
- union $A \cup B$
- mutually exclusive $A \cup B = \emptyset$
- Cartesian product. $A \times B = \{(a,b) \mid a \in A, b \in B\}$
- symmetric difference

$$A \oplus B = (A - B) \cup (B - A)$$

partition:
collection of subsets whose union forms the set

Venn diagrams

popular "thanks" to social media but often used incorrectly

