

# Discrete Structures

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## 1 Introduction

### 1.1 Terminology

A *structure* consists of certain *sets*. It also contains *elements* of these sets, *operations* on these sets and *relations* on these sets.

### 1.2 Carriers to learn

The following carriers must be learnt:

$\mathbb{N}$  The set of natural numbers (all whole numbers from 0 to  $\infty$ )

$\mathbb{Z}$  The set of integers (all whole numbers from  $-\infty$  to  $\infty$ )

$\mathbb{Q}$  The set of rational numbers (any integer divided by any other integer - e.g.  $\frac{5}{4} = 1.25$ )

$\mathbb{R}$  The set of real numbers (all finite and infinite decimal numbers)