

COMP11120 Notes

Todd Davies

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1 Discrete Structures

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 ∞)

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

\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)