signed number
size
plain number
quantitative
sign
qualitative

Chapter 1

Qualitative Analysis

In this chapter, we revisit a number of concepts about *numbers* which the reader probably already encountered in one form or the other but which s/he should nevertheless carefully study here, "pencil in hand", because here they will be discussed in terms of how we will use them throughout this text.

1.1 Sign and Size

A **signed number** carries two very different pieces of information:

- a **size**, namely a **plain number**, that is an unsigned number, which is the **quantitative** part of the feature in that it indicates "how much" of the feature there is.

  NOTE. Instead of the word "size", textbooks mostly use "absolute value" but, sometimes, "numerical value" or "modulus" or "norm". None of these words will be used in this text.

- a **sign**, namely + or −, which is the **qualitative** part of a "feature" in that it indicates "which way" the feature is going.