

0.1 Functions and brackets

0.1.1 Functions (or maps)

Functions take other terms, and are themselves terms. For example if we wanted to know if someone can legally drive in a specific country, we could use:

$P(you, age(UK))$

A function may not be able to produce an output for all inputs. For examples $age(green)$ has no interpretation.

Functions can also take different numbers of inputs. Constants, such as “you” and “UK” can be shown as functions with 0 inputs. As a result we could instead write:

$P(you(), age(UK()))$

We generally denote functions with a lower case letter, so would instead write:

$P(y(), a(b()))$

Functions are also called maps.