Functions

How to describe a function?

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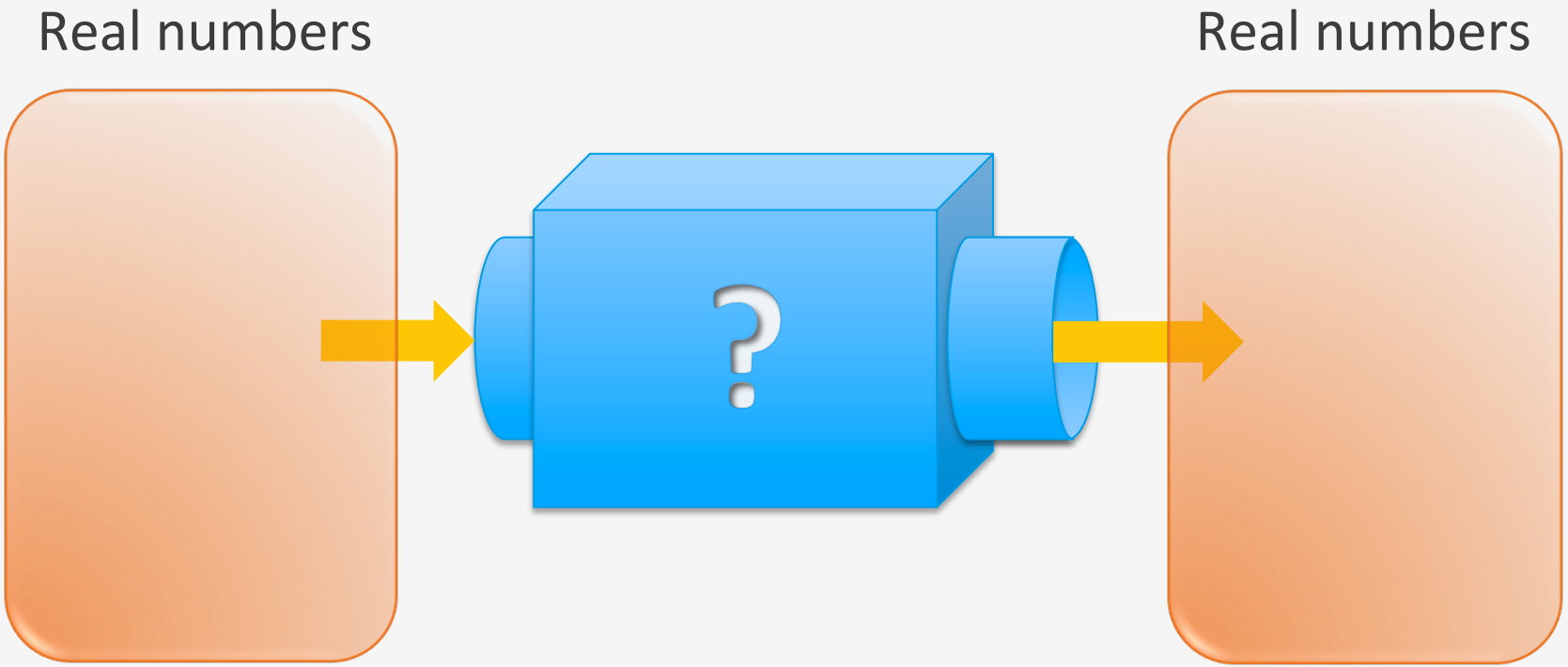
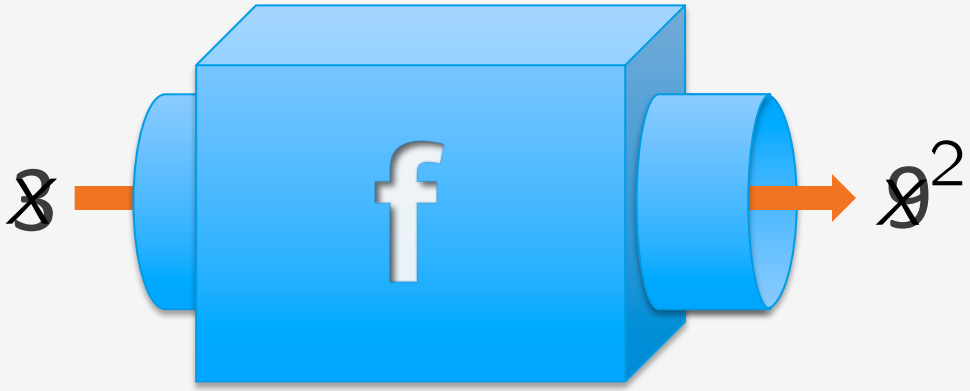


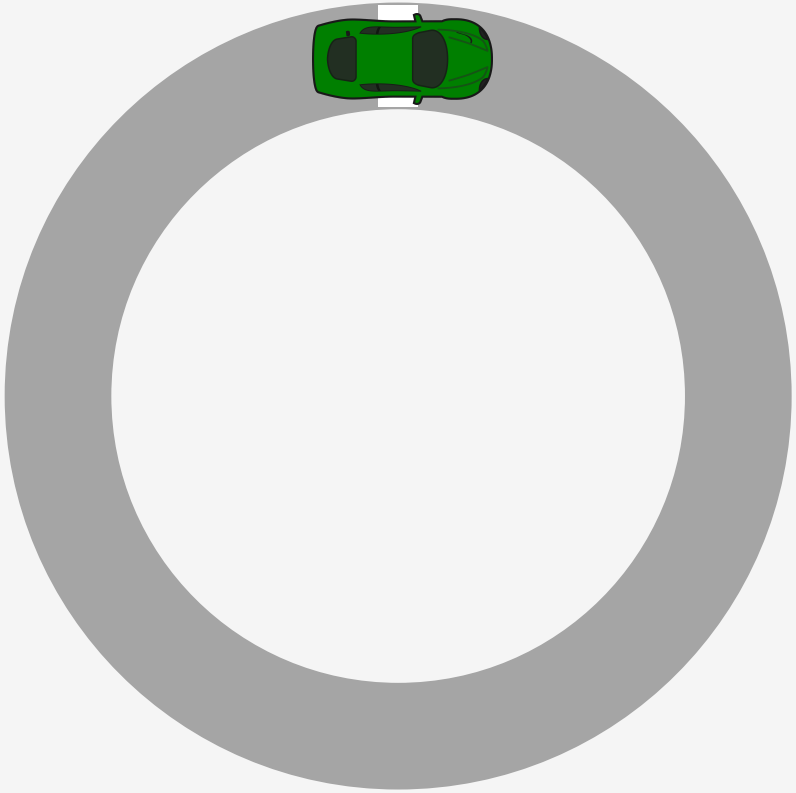
Formula



Notation

- The function
  $f : x \mapsto x^2$
- The function
  $f(x) = x^2$

Lap times



Function!

Lap	Time
1	1.4
2	1.7
3	1.5
4	1.5

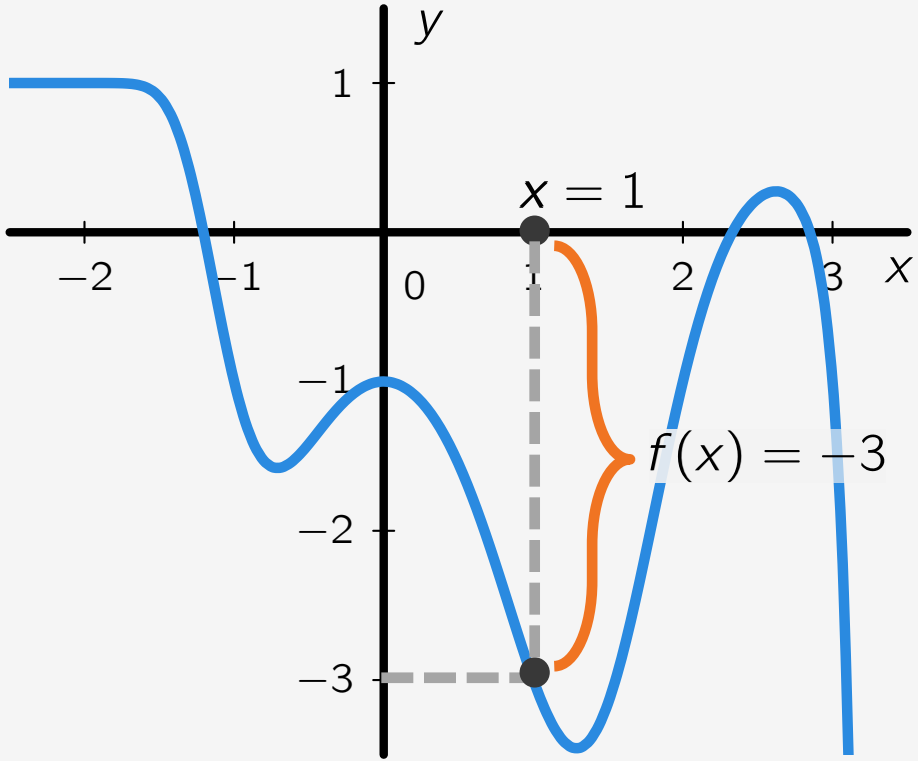
Tables

Year	World population (mln)
1990	5,263
1995	5,674
2000	6,070
2005	6,454
2010	6,972

x	x^2
-2	4
1	1
0	0
1	1
2	4
3	9

Very incomplete!

Graph



Function f :

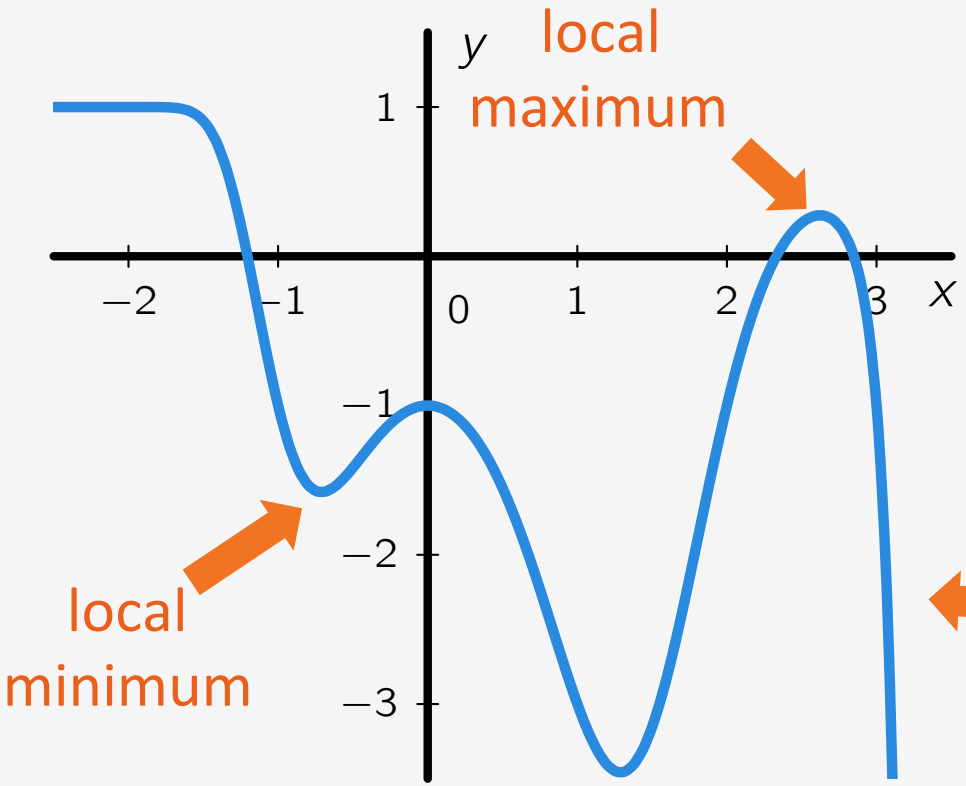
Input: x

Output: $f(x)$

Example:

$f(1) =$

Graph



$$f(x) =$$

$$1 - 2^{\frac{1}{4}x^5 - x^4 + \frac{1}{4}x^3 + \frac{3}{2}x^2 + 1}$$

The floor function

In words: floor(x) is the largest integer $\leq$ x

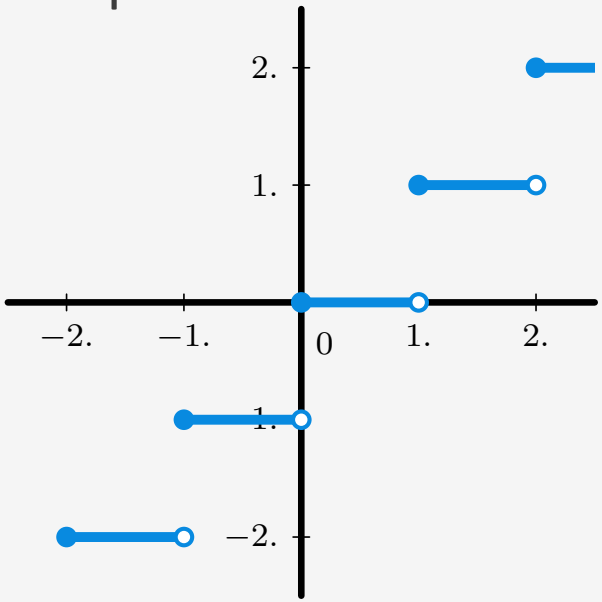
Formula:

$$\text{floor}(x) = \lfloor x \rfloor$$

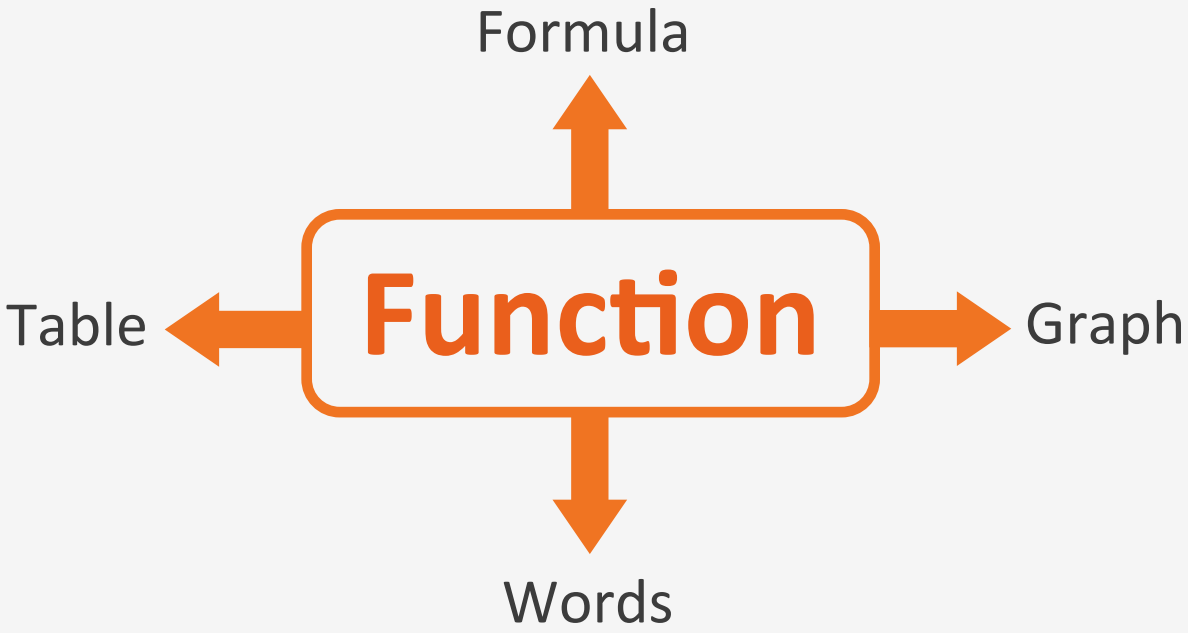
Table:

x	floor(x)
-1	-1
-0.5	-1
0	0
0.5	0
1	1
1.5	1

Graph:



Describing a function: summary



Thank you for your attention!

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