

Mavscript and graphs - using LaTeX and TikZ

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1 How to create graphs in mavscript-yacas

Mavscript does not support graphs directly, as it is only text based. A convenient work-around is to use a \LaTeX -template for Mavscript.

Generating graphics in \LaTeX is comfortable using *TikZ*. Indeed *PGF/TikZ* is a \TeX macro package for generating graphics.

1.1 How to call mavscript

Convert this Mavscript template to the final output pdf like this:

1. mavscript-yacas example.tex
2. pdflatex out-example.tex

1.1.1 Notes

Working with \LaTeX , Mavscript's standard control character is the paragraph sign § (§*m*, §*i*, §*o*, §*n*, §*io*). The dollar sign is not used, as in \LaTeX it stands for the math mode.

The *PGF/TikZ* packages are included in the common \TeX distributions TeX Live, MacTeX and MikTeX.

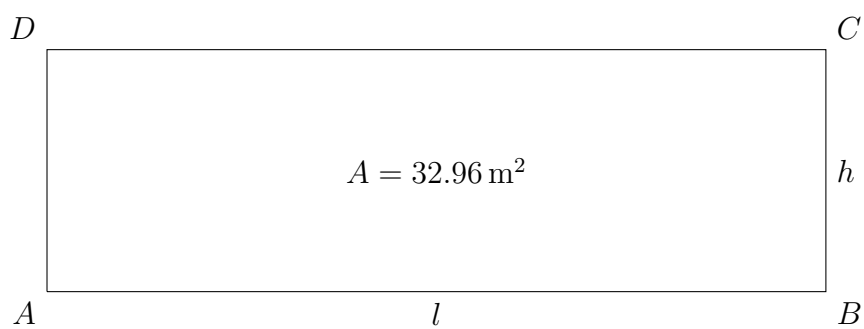
2 Mavscript calculation example

The rectangle measures:

Length $l := 10.3 \text{ m}$

Hight $h := 3.2 \text{ m}$

The area of the rectangle is $A := l \cdot h = 32.96 \text{ m}^2$.



The rectangle is long.