

Before university

Student IT prerequisites:



TI-Nspire

Gym-package

with(Gym) :

Past
No f
Pres
Han

First week

The first weekly test
Maple syntax

First assignment

Past:

No formal format requirements

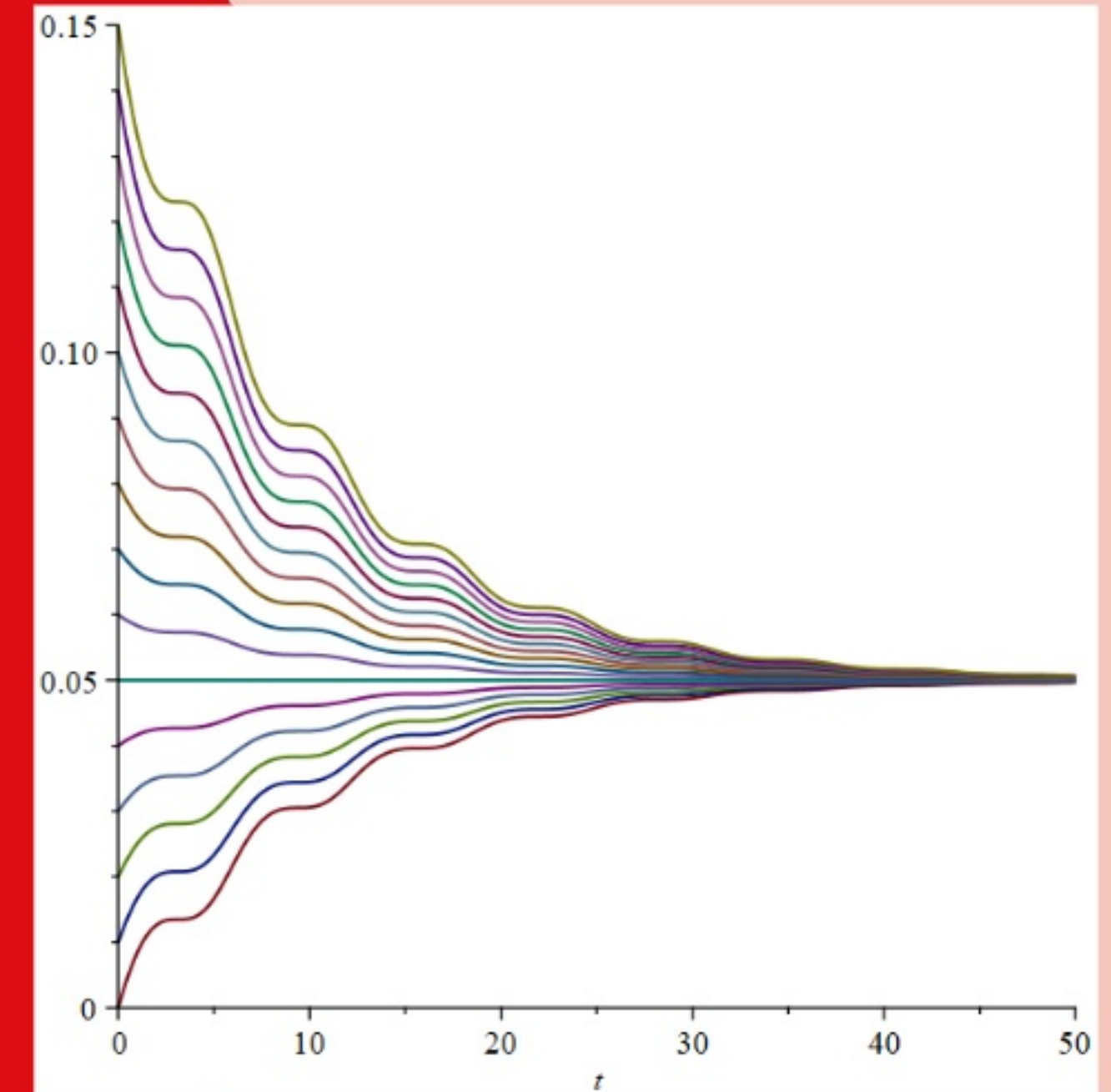
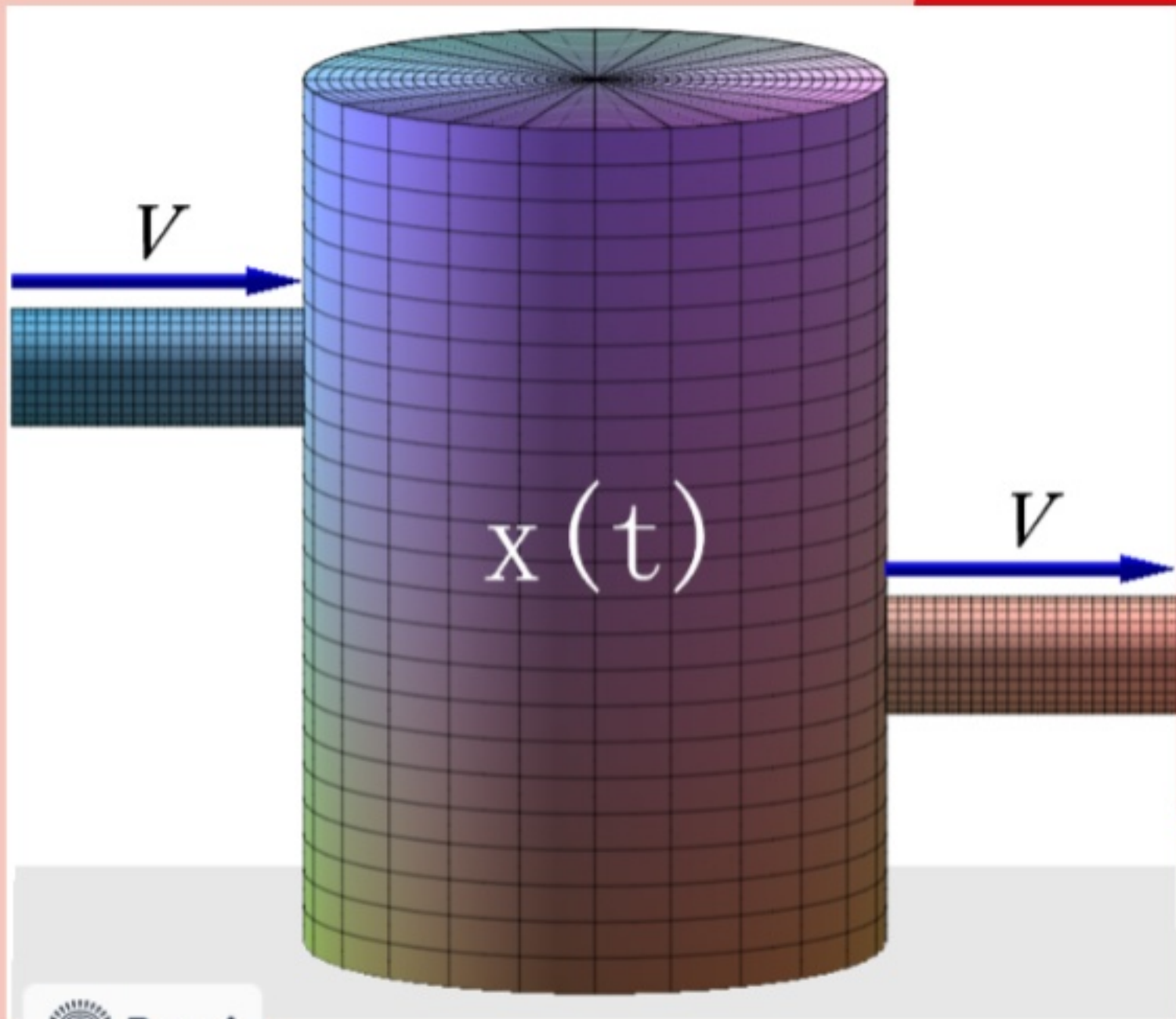
Present:

Hand-in divided in two

Theme exercise

Modeling

How the learned methods can be used in practice

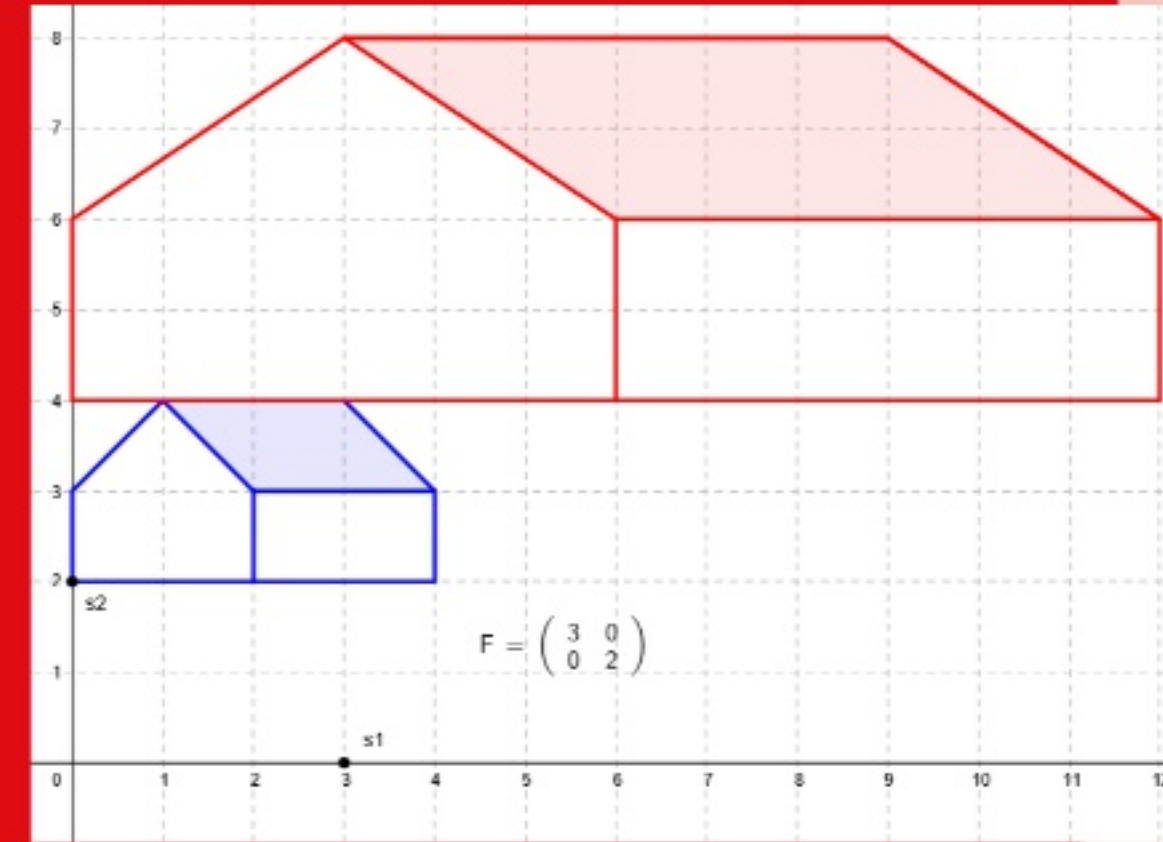
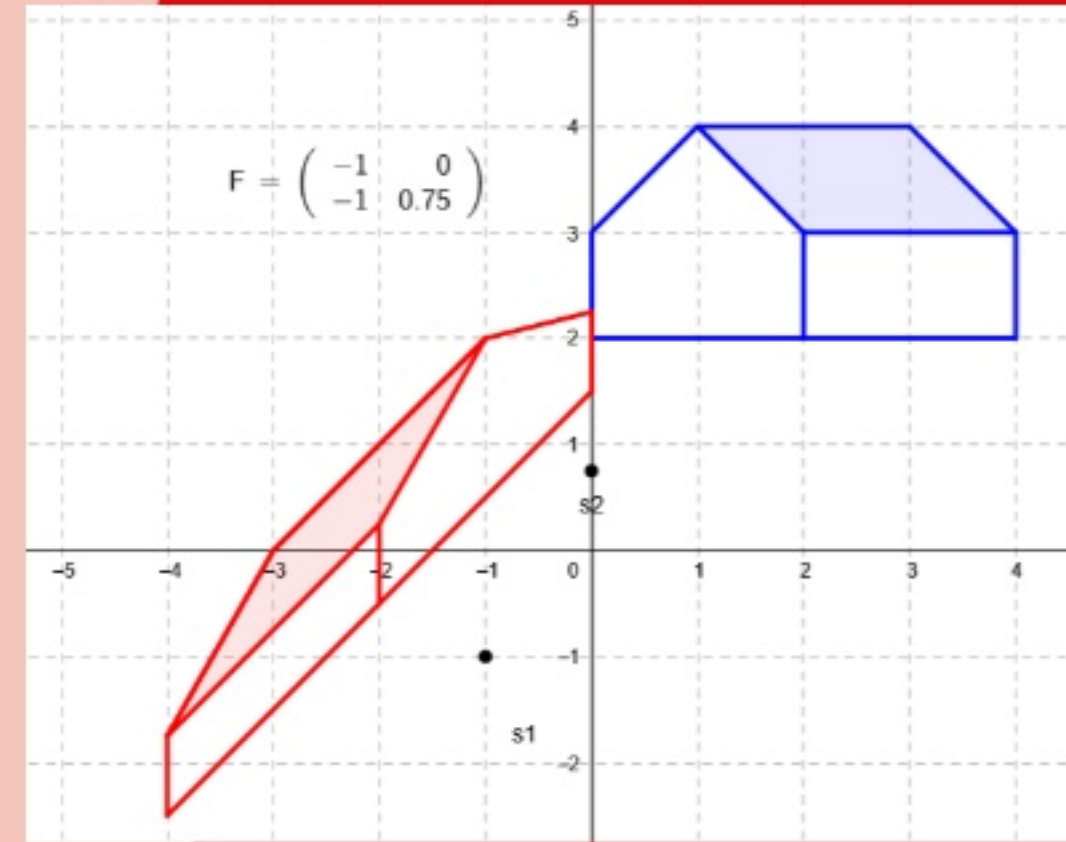


Fall

Get the
curricu

Show
unders
Maple

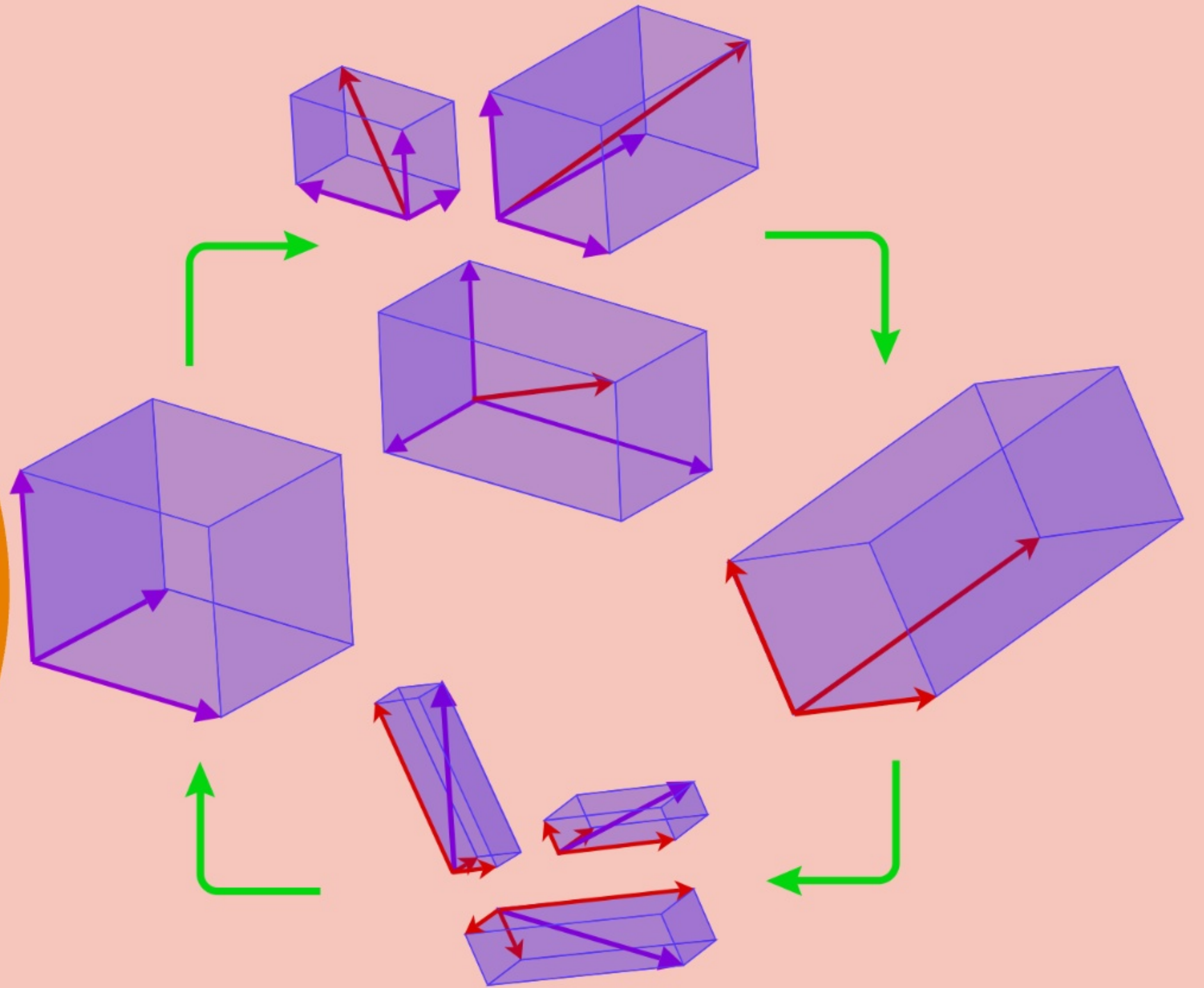
Understanding a linear map



Change of basis

The first maple black box

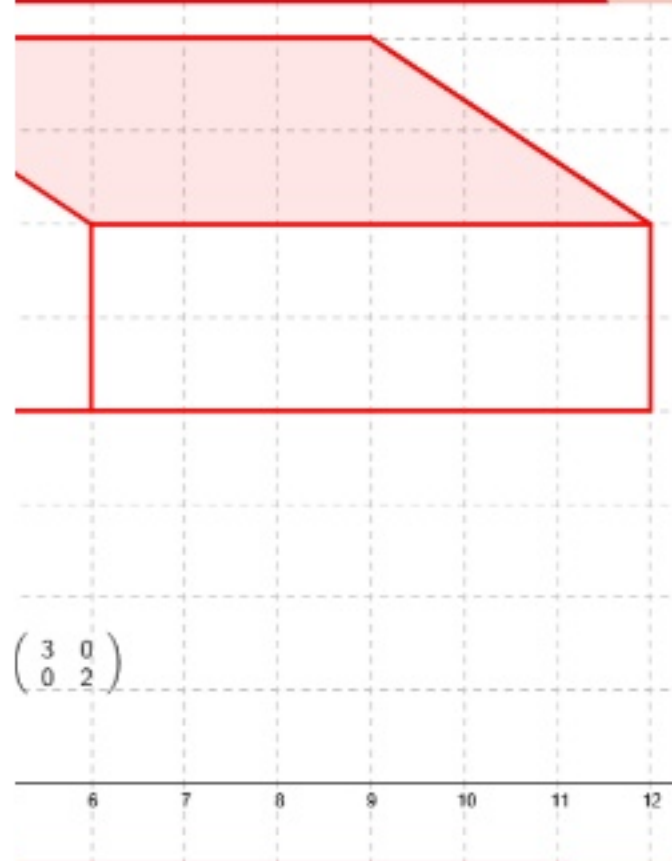
Does understanding of mathematics gets improved by using maple commands?



Fall exam

Get through as much curriculum as possible

Show mathematical understand and not just Maple skills

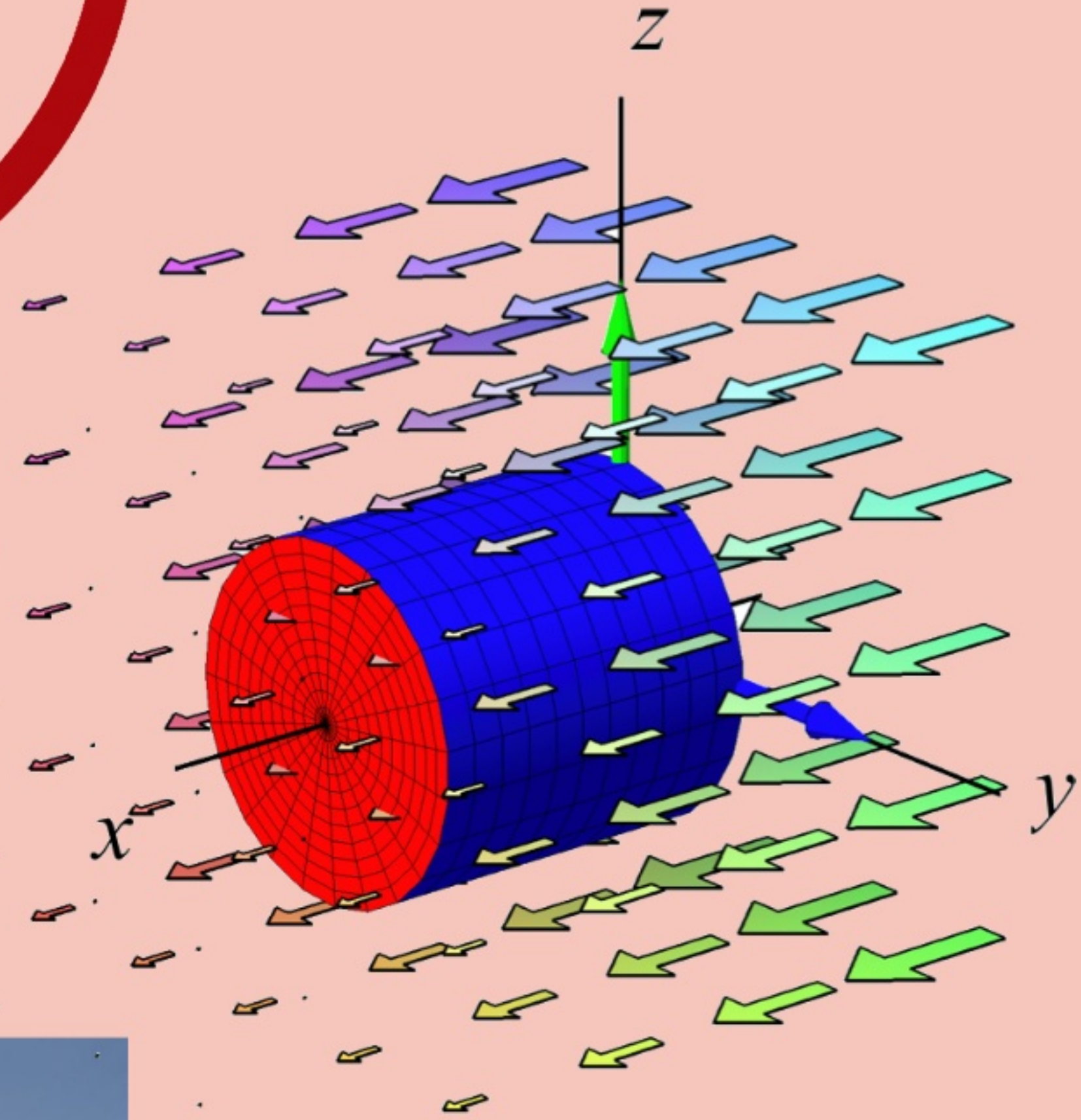
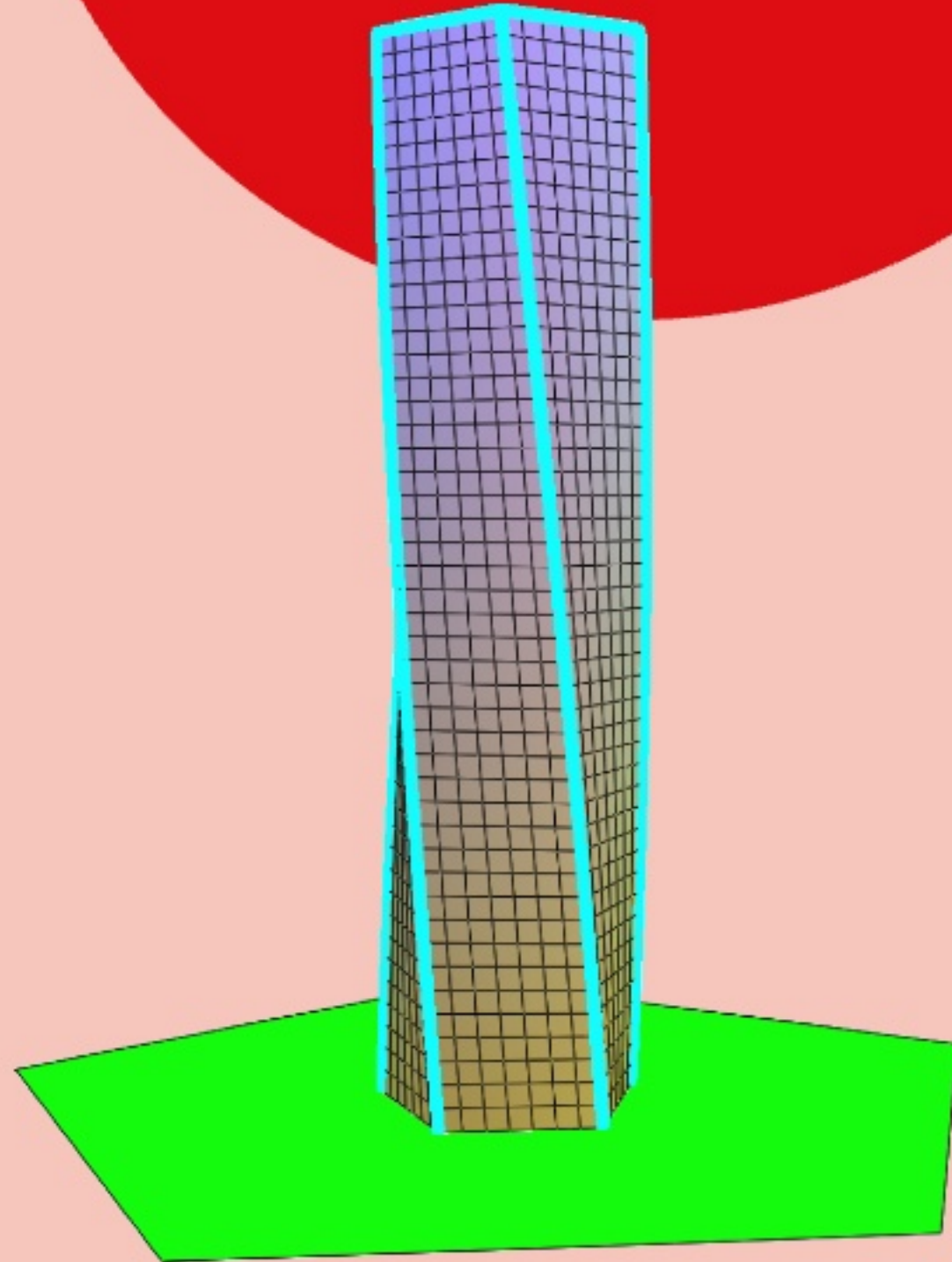




New Year

A year of Mathematics 1

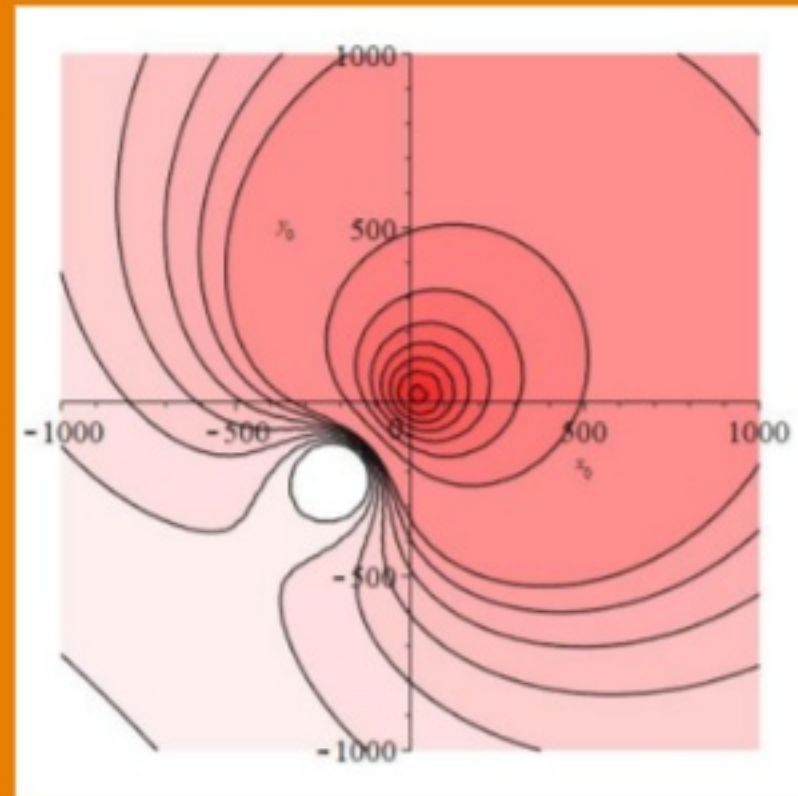
Parametrization of curves, surfaces and solids



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- Ma
- Mo
- Ma
- Imp

Math project

$$D(x, y) = \int_0^{\frac{1}{50} \sqrt{(-200-x_0)^2 + (-200-y_0)^2}} 2525.443904 (t^{-1})^{3/2} \\ \cdot e^{1/4 \frac{1}{t} \left(-0.0001 \left(50 \frac{t(-200-x_0)}{\sqrt{(-200-x_0)^2 + (-200-y_0)^2} + x_0 \right)^2 - 0.0001 \left(50 \frac{t(-200-y_0)}{\sqrt{(-200-x_0)^2 + (-200-y_0)^2} + y_0 \right)^2 - 1.0 \right)} \\ \cdot e^{\frac{\sqrt{(-200-x_0)^2 + (-200-y_0)^2}}{1000} - t/20} dt$$

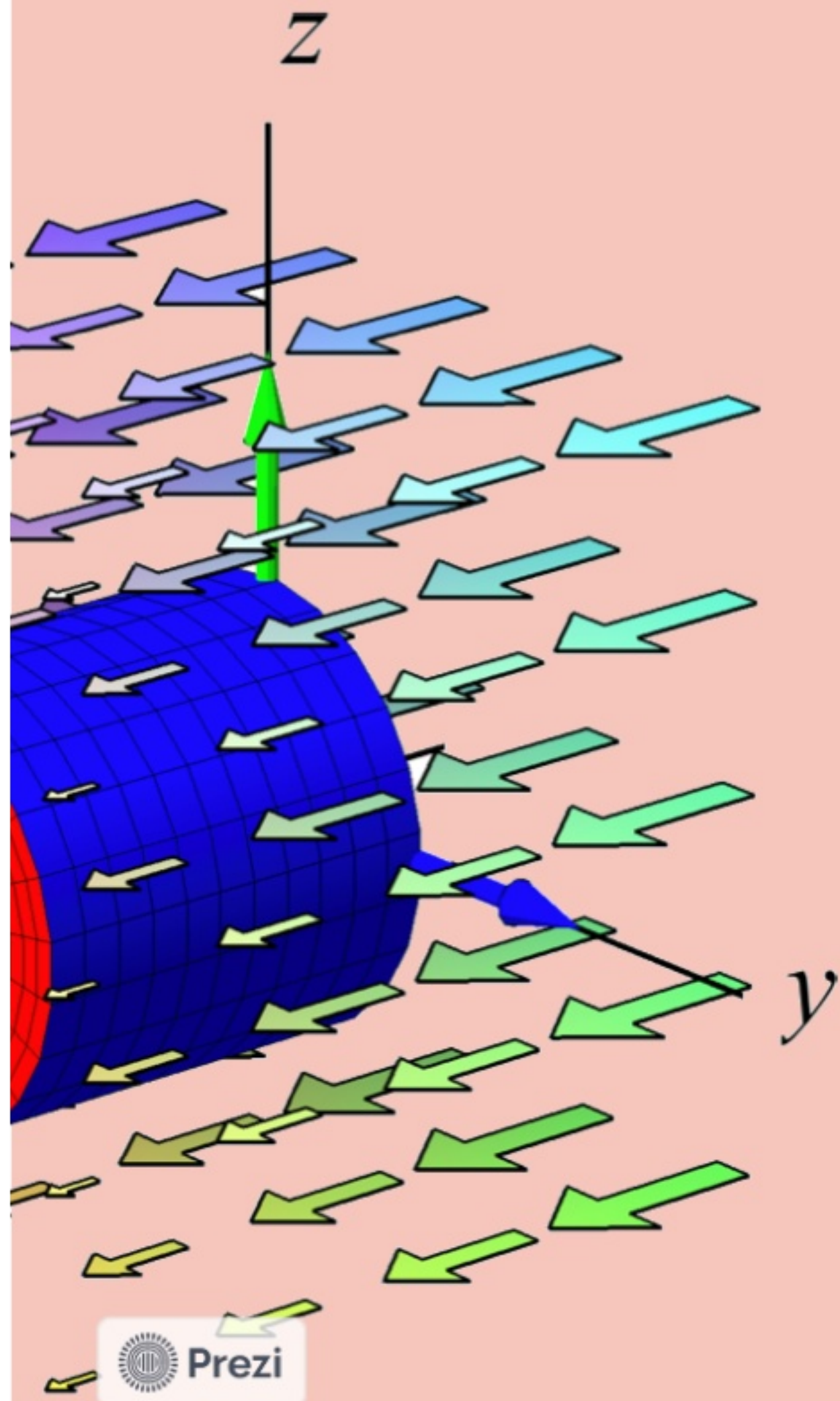


The
Pitf

Spring exam

The mythical Maple script

Pitfalls of Maple



Themes

- Computational thinking
(but not programming)
- Mathematical thinking
- Modeling and visualization
- Maple as a help
- Improvements?

Which tools do
we use now?

