My First Assignment

Gentle Steps Towards Programming in *Mathematica*

<my name>
<date>

■ Introduction

In this notebook we practice how to write text, enter formulas, format the layout and appearance of a notebook, and also perform a few programming examples.

■ Formula Examples

Formulas can appear within a text, as for example: $\frac{1}{2}\sqrt{\frac{x}{\sin(x)}}$. One can enter these formulas using the built-in palettes or by keyboard shortcuts, as e.g., ESC inf ESC, which prints as the infinity symbol ∞.

■ Practicing how to enter formulas in text

Here are a few more examples of formulas.

Note: Put each formula into a separate Text Cell starting with a TAB and a Filled Square (■). Start entering formulas by typing: CTRL-9 (that is, hold down the CTRL-key and the 9-key).

- (a) $\int x^n \, dx$
- (b) $\int \text{Exp}(a\, x^2)\, dx$
- (c) $\int E^{a\, y^2}\, dy$
- (d) $\int \sqrt{a + b\cos(c\, z)}\, dz$
- (e) $\cos\left(\frac{1+\sqrt{1-x}}{1-\sqrt{1-x}}\right)$
- (f) $4\, x^3 + 3\, x^2 + 2\, x + 1 = 0$