

Calculator Advice

Prof. Alan Robert Clark

February 14, 2006

Preamble

In the '80's, a relatively fancy engineering calculator was *absolutely essential*: numerical integration was impossible unless you had one. They were *large*, worn on the belt to identify you as an engineer/nerd, and frequently produced in public settings in order to show that you knew what it was.

Notably, the popularity of the engineering calculator was mainly because computers, used for the really heavy tasks, fitted in warehouses, not iPods.

In current times, the ability to do fancy stuff on a small calculator is simply *not required*.

What to get

A “non-fancy”, but engineering calculator, with:

- complex numbers,
- limited keystroke programming,
- Reverse Polish Notation (RPN). (Infinitely better than Bracket Mania)

The ideal current example is about R0.6k, and is GO, as aligned to HAL :-)

What not to get

- Graphics capability—use Octave/Matlab.
- Fancy integration capability—use Octave/Matlab.
- Fancy root-solving capability—use Octave/Matlab.
- Fancy matrix-operations—use Octave/Matlab.
- Geddit?

Note that none of the fancy functions will help *one little bit* in an exam, even if you CAN ACTUALLY drive your fancy calculator, and ACTUALLY KNOW what *all* the buttons do: we *just simply don't* set exams that way anymore. We now look for understanding, and trust me: “There ain't no “understanding” button”.

Unfortunately, bursary companies are still living in the dark ages, and will happily sponsor a R2k calculator, but not a R5k computer, which really is the tool you require.