MATH 205 Survival Guide - Best ENCS Approved Calculator

By Frogge

1 Approved Calculators

Here's the list of models that we're allowed to use: Approved calculators.

A good calculator gives such a big advantage over a bad calculator that it feels like cheating. It's not cheating though, it's perfectly legal. Bad and good calculators even go for the same price so invest in a good one. It will serve you well in future classes at Concordia.

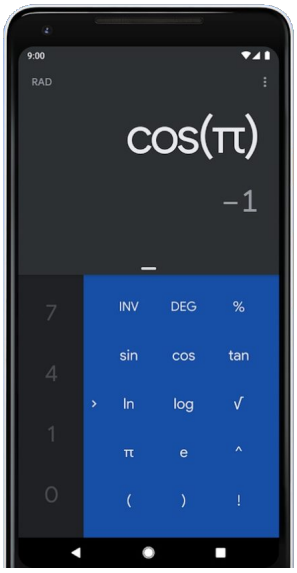

Figure 1: Don't bring this one to the exam though.

2 Sharp EL-531XT vs Casio FX-300ES Plus

(a) Sharp EL-531XT. (b) Casio FX-300ES Plus.

Figure 2: Both calculators cost around 20 CAD.

My original model was the *Sharp EL-531XT*. A classmate recommended the *Casio FX-300ES Plus* model to me and I haven't looked back since. Let's see how they compare.

2.1 Natural Textbook Display + Fraction & Root Simplification

The *Casio* calculator displays expressions just like a human would write them and performs simplification automatically (as seen in Figure 2). It can also toggle between decimal and fraction & root display at the click of a button.

2.2 Fraction Summation

Definite integrals often involve messy fraction summations like:

$$\frac{3}{5} + \frac{4}{3} + \frac{5}{6} = \frac{83}{30}$$

I would be stuck doing this mostly by hand with my *Sharp*. The *Casio* gives the simplified fraction answer directly.

2.3 Precise Trigonometric Function Results

It's good to know the trigonometric unit circle inside out. But you don't really need to if you have the *Casio* because it will give you the results in fractions of π. Although I still suggest memorizing the unit circle for the interval $0 \leq \theta \leq \frac{\pi}{2}$.

$$\sin(\frac{2\pi}{3}) = \frac{\sqrt{3}}{2}$$

$$\arctan(\frac{1}{\sqrt{3}}) = \frac{\pi}{6}$$

3 Conclusion

A good calculator reduces opportunities to make mistakes, saves time, and lets you keep your head clear for other things in the heat of the moment.