

Classpad Help Series sponsored by Casio Education Australia		www.casioed.net.au	
671	Differentiation From First Principles	Author	Charlie Watson
		Date	31 January 2010
		CPM OS	03.04.4000

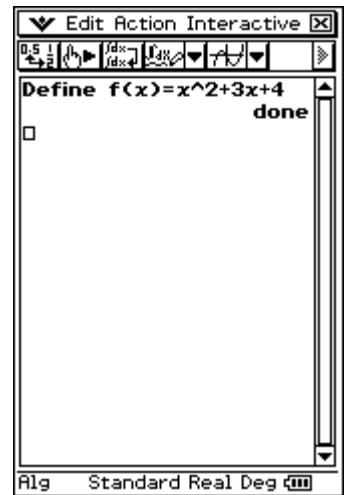
Start in eActivity.

This eActivity contains a Main strip which can easily be re-used to solve most derivatives from first principles.

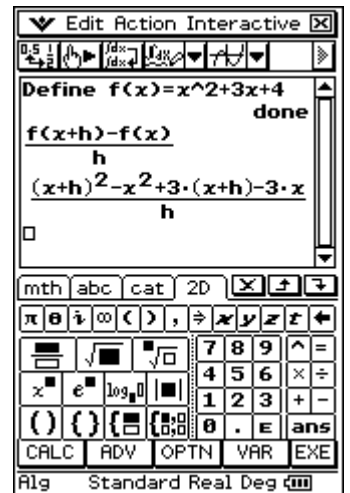
Example: Differentiate $x^2 + 3x + 4$ from first principles.

Tap **Insert, Strip, Main** and then **Resize**.

Define the function as $f(x)$.



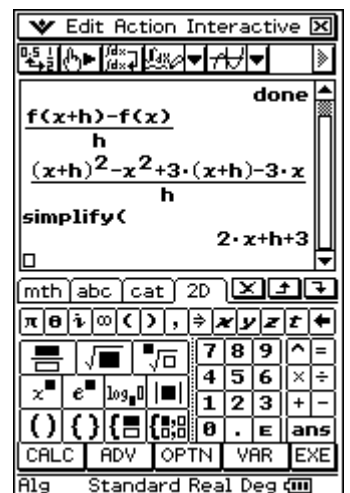
Next set up the first principles expression and tap **EXE**.



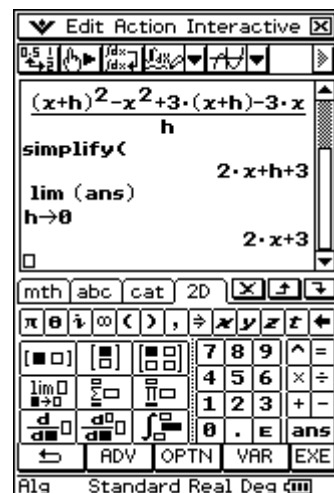
Classpad has not fully simplified the result.

Tap **Action, Transformation, simplify**.

Tap **EXE**.

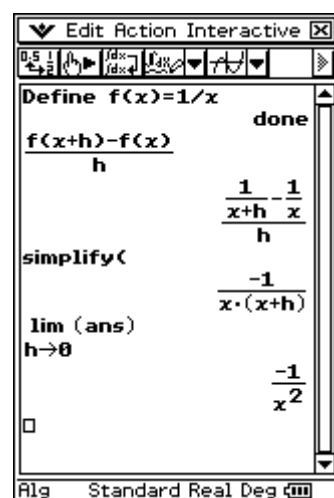


Finally set up the limit of this expression as $h \rightarrow 0$.



To use the strip for another problem, simply modify the definition of $f(x)$ and tap **EXE**.

The display is completely updated and you can see the basic steps in finding the derivative from first principles.



Close the strip, enter a suitable title for it and save the eActivity.

