**Calculating GMMs using Excel**

*I’ve personally found them quicker and less error-prone, feel free to ignore or use.*

Excel has a very handy way to quickly compute normal distributions – this is called the NORM.DIST function. So for example, the formula

NORM.DIST(0, 1, 2, FALSE)

Would be equivalent to

This allows for instance Q3 part (b) of the 2019-2020 Term 2 paper to be answered in one line:

=0.5 \* NORM.DIST(0, -2, 1, FALSE) + 0.3 \* NORM.DIST(0, 1, 2, FALSE) + 0.2 \* NORM.DIST(0, 4, 0.5, FALSE)

## Syntax

NORM.DIST(, , , FALSE)

Note that is the standard deviation, **NOT** the variance (and hence you may need to square-root or square as appropriate).