# Everything you need to know for integration tricks

In this document, I won’t cover all the standard antiderivatives, but manipulate those into harder expressions

Ex

I’ll oragnise this later, but for now it will be amess

Recognise that

When taking the integral, the ½ and 2 will cancel, so this is quick to integrate

HOW THE DERIVATIVE OF ARCFUNCTIONS WE’RE DISCOVERED

The x could be substituted with

\*note that you could substitute cos instead of sin, and you’d get -arccos(x), and that’s fine because they differ by a constant

Some interesting u-subs

## Non-elementary integrals

This will be a list of non-elementary integrals, so you won’t need to worry too much about them: