Integrating with inverse trigonometric functions

Use an appropriate substitution to show that

Think what value of would make nicely simplify.

Dealing with , , ….

Use our previous results to fill in the table below:

Show that where is a positive constant and .

We can extend these results to give some standard results which are given in the formulae book:

1. Find
2. Find
3. Find
4. Find

Ex 3D Pg 67-68