Standard Integrals



Standard Integral Examples

Not Quite so Standard Examples

Using Identities

What now??

Sometimes there are techniques which work on non-hyperbolic trig functions but doesn’t work on hyperbolic ones. Just first replace any hyperbolic functions with their definition.

Examples

1. Find
2. Find

Dealing with , , ….

We can use substitution to deal with this style of integration.

* Consider . What substitution might we use?
* Consider. What substitution might we use?

Example

1. Show that
2. Show that
3. Show that .

Test Your Understanding



2)Using a hyperbolic substitution, evaluate

Integrating by Completing the Square

By completing the square, we can then use one of the standard results.

Examples

1. Determine
2. Determine

Test Your Understanding



Ex 6E and Mixed Ex 6