

## Section 1: Introducing the hyperbolic functions

### Crucial points

1. **Remember that using the definitions is often useful**

When faced with an equation like  $\cosh x + 2\sinh x = 1$ , you might be tempted to think that you need to solve it in the same way as the equivalent trigonometric equation. However, writing the equation in terms of exponentials is often a useful method. Sometimes, however, this doesn't work out easily, and you may find that using an identity is more successful.

2. **Make sure that you know all the relevant techniques of differentiation and integration**

The calculus techniques you use in this unit are not new: you have used them all before in the context of different functions. If you are having any difficulty, look back to the calculus work A level Mathematics.