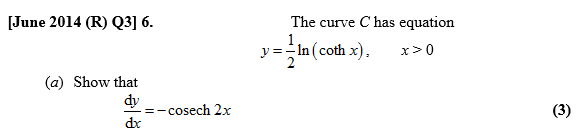
Differentiating hyperbolic functions

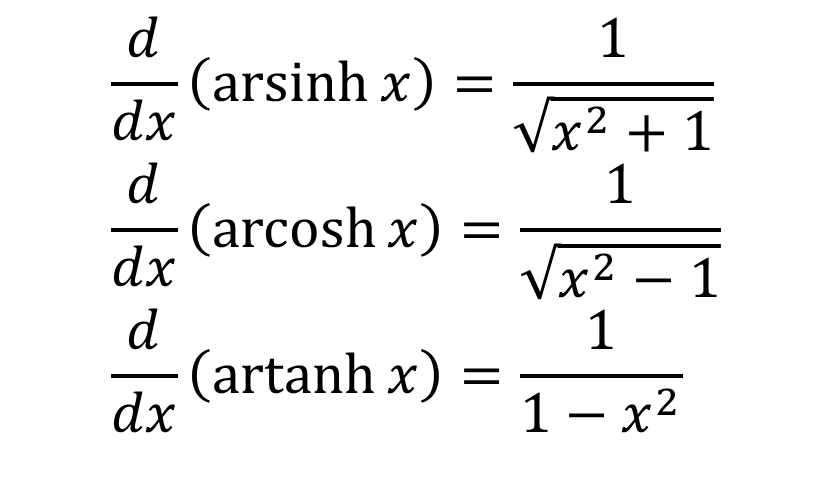
Example

Prove that

Test Your Understanding



Inverse Hyperbolic Functions

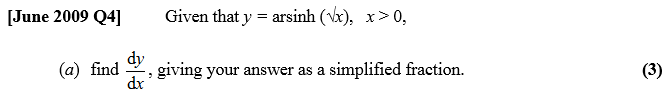


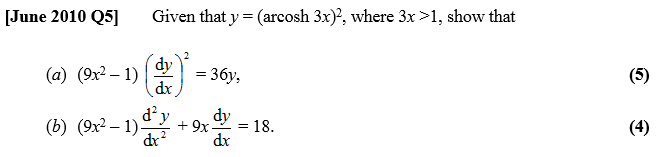
Proof of

Examples

1. Find
2. Given that prove that

Test Your Understanding





Using Maclaurin expansions for approximations

Textbook Example

(a) Show that **[We did this earlier]**

(b) Find the first two non-zero terms of the series expansion of .

The general form for the series expansion of is given by

(c) Find, in simplest terms, the coefficient of .

(d) Use your approximation up to and including the term in to find an approximate value for .

(e) Calculate the percentage error in using this approximation.

Ex 6D pg 133