Calculus Formulae Sheet

1 Integrals

1.1 Hyperbolic Functions

$$\int \sinh(ax)dx = \frac{1}{a}\cosh ax + C \tag{1}$$

$$\int \sinh(ax)dx = \frac{1}{a}\cosh ax + C$$

$$\int \sinh^2(ax)dx = \frac{1}{4a}\sinh 2ax - \frac{x}{2} + C$$

$$\int x \sinh(ax)dx = \frac{1}{a}x \cosh ax - \frac{1}{a^2}\sinh ax + C$$

$$(1)$$

$$(2)$$

$$(3)$$

$$\int x \sinh(ax)dx = \frac{1}{a}x \cosh ax - \frac{1}{a^2}\sinh ax + C \tag{3}$$

(4)