Hyperbolic Functions Proof	
Use the exponential definitions of $\sinh x$ and $\cosh x$ to show that: $\cosh^2 x - \sinh^2 x = 1$	Show that $\tanh x = \dfrac{e^{2x} - 1}{e^{2x} + 1}$
Find in terms of e: $\sinh(3)$ $\dfrac{e^3}{2} - \dfrac{1}{2e^3}$	Hyperbolic sine can be defined exponentially as: $\sinh x = \dfrac{e^x - e^{-x}}{2}$
Use the exponential definitions to find the derivative of $\sinh x$ $\dfrac{d}{dx}(\sinh x) = \cosh x + c$	Use the exponential definitions to find the integral of $\cosh x$ $\int \cosh x \ dx = \sinh x + c$
Find the value of $\cosh(5)$ to 2 decimal places 74.21	Use the exponential definitions to find the derivative of $\cosh x$ $\dfrac{d}{dx}(\cosh x) = \sinh x$
Hyperbolic cosine can be defined exponentially as: $\cosh x = \dfrac{e^x + e^{-x}}{2}$	(a) Find $\sinh(-x)$ in terms of $\sinh(x)$ $\sinh(-x) = -\sinh x$ (b) Find $\cosh(-x)$ in terms of $\cosh(x)$ $\cosh(-x) = \cosh x$
Use the exponential definitions to find the integral of $\sinh x$ $\int \sinh x \ dx = \cosh x$	Hyperbolic tangent can be defined as: $\tanh x = \dfrac{\sinh x}{\cosh x}$