

The cosh Function

The $y = \cosh x$ function is defined as

$$\cosh x = \frac{e^x + e^{-x}}{2}$$

The other hyperbolic functions are

$$\sinh x = \frac{e^x - e^{-x}}{2}$$

$$\tanh x = \frac{e^x - e^{-x}}{e^x + e^{-x}}$$

What they look like you can find out for yourself by activating the JAVA module below

Here a few examples as how to write equations

| | |
|-------------------|------------------------|
| cos(x) | exp(x) |
| cos(x*2) | exp(1/x) |
| cos(x/40) | x^2 |
| cosh(x) | 1/x^2 |
| cosh(40*x) | 1/(x^3+10) |
| | 1/(exp(x-20)+1) |