

COURSEWORK 1

1. With what value of x is Euler's identity derived from Euler's formula?
 - a. Compile your answer with L^AT_EX

Euler's Formula *Euler's formula, named after Leonhard Euler, is a mathematical formula in complex analysis that establishes the fundamental relationship between the trigonometric functions and the complex exponential function,*

$$e^{ix} = \cos(x) + i\sin(x)$$

Solution.

When $x = \pi$, Euler's formula evaluates to,

$$e^{i\pi} + 1 = 0$$

Which is Euler's identity. ■