1. With what value of $x$ is Euler's identify derived from Euler's formula?
a. Compile your answer with $\mathrm{AT}_{\mathrm{E}} \mathrm{X}$

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,

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

## Solution.

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

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

Which is Euler's identify.

