The natural logarithm of -1 is **πi**.

Here's why:

* **Euler's Formula:** This fundamental equation in complex analysis states: e^(iθ) = cos(θ) + i\*sin(θ)
* **Setting θ = π:** e^(iπ) = cos(π) + i\*sin(π) e^(iπ) = -1 + 0i e^(iπ) = -1
* **Taking the natural logarithm of both sides:** ln(e^(iπ)) = ln(-1) iπ = ln(-1)

Therefore, ln(-1) = πi.