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Integrate[Sin[z]^2/Sinh[z]^2, {z, 0, Infinity}]
```



Definite integral:

$$\int_0^{\infty} \frac{\sin^2(z)}{\sinh^2(z)} dz = \frac{1}{4} (-1 + 2\pi \coth(\pi)) \approx 1.32667\dots$$