$$\zeta(2) \equiv \sum_{k=1}^{\infty} \frac{1}{k^2} = \frac{\pi^2}{6}$$

```
z[n_: Integer] := Sum[1/k^n, {k, 1, Infinity}]
```

$$z(\text{n\_ : Integer}) := \sum_{k=1}^{\infty} \frac{1}{k^n}$$