

## Maths of the Day

$$\sum_{n=1}^{\infty} \frac{H_n}{n+1} \left( \zeta(2) - 1 - \frac{1}{2^2} - \cdots - \frac{1}{n^2} \right) = \frac{5}{4} \zeta(4)$$

$$\sum_{n=1}^{\infty} \frac{H_n}{n+1} \left( \zeta(3) - 1 - \frac{1}{2^3} - \cdots - \frac{1}{n^3} \right) = 4\zeta(5) - 2\zeta(2)\zeta(3)$$