

Maths of the Day

$$\sum_{n=1}^{\infty} \frac{H_n^2}{n^3} = \frac{7}{2}\zeta(5) - \zeta(2)\zeta(3)$$

$$\sum_{n=1}^{\infty} \frac{H_n^2}{n^4} = \frac{97}{24}\zeta(6) - 2\zeta^2(3)$$

$$\sum_{n=1}^{\infty} \frac{H_n^2}{n^5} = 6\zeta(7) - \zeta(2)\zeta(5) - \frac{5}{2}\zeta(3)\zeta(4)$$