Maths of the Day

For $m_1 = m_2 \cdot \cdot = m_k$ are all equal to some $m \in \mathbb{N}$ then

$$\zeta(\{m\}^k) = \sum_{n_1 > n_2 > \ldots > n_k \geq 1} \frac{1}{(n_1 n_2 \ldots n_k)^m}$$

In particular

$$\zeta(\{2\}^k) = \frac{\pi^{2k}}{(2k+1)!}$$