## Harmonic Numbers

March 15, 2021

$$H_n = 1 + \frac{1}{2} + \frac{1}{3} + \ldots + \frac{1}{n} = \sum_{k=1}^{n} \frac{1}{k}$$

Other notations apart from  $H_n$  -  $h_n$  ,  $S_n$ ,  $\psi(n+1) + \gamma$ 

$$H_{2^m} \ge 1 + \frac{m}{2}$$

$$\Delta - \delta$$