

$$\begin{aligned}
\mathbb{E}[X] &= \mathbb{E}\left[\sum_{i=1}^n X_i\right] \\
&= \sum_{i=1}^n \mathbb{E}[X_i] \\
&= \sum_{i=1}^n 1/i \\
&= \ln n + O(1)
\end{aligned}$$