Math 1190 Quiz #4

Problem 1: Find the sum of the series

$$1 + \frac{1}{2} + \frac{1}{3} + \frac{1}{4} + \frac{1}{6} + \frac{1}{8} + \frac{1}{9} + \frac{1}{12} + \cdots,$$

where the terms are the reciprocals of the positive integers whose only prime divisors are 2's and 3's.

Problem 2: Compute $\sum_{i=1}^{\infty} \frac{n^2}{4^n}$.

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