**Example 4.37.** Let $P(i) = 2^i$. Then $\sum_{i=1}^{4} P(i) = \sum_{i=1}^{4} 2^i = 2^1 + 2^2 + 2^3 + 2^4$.

**Problem 4.38.** *Compute* $\sum_{i=0}^{3} 2i + 1$ *and* $\sum_{i=0}^{3} 1$.

**Problem 4.39.** *Prove that* $\sum_{i=1}^{n} (i+1)2^i = n2^{n+1}$ *for* $n \in \mathbb{N}$.