$Hello, TeX!$

$$\sum_{i=1}^{n} \sigma(i) = \sum_{i=1}^{n} \sum_{d|i} 1 = \sum_{i=1}^{n} \sum_{d=1}^{n} [d|i] = \sum_{d=1}^{n} \sum_{i=1}^{n} [d|i] = \sum_{d=1}^{n} \lfloor \tfrac{d}{i} \rfloor$$

$$\frac{\partial x^2 y}{\partial x} = 2xy$$