

# Mathematical Analysis

## Exercise

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### 1 Summation notation

If we have a sum like this:

$$a(1) + a(2) + a(3) + \dots + a(n)$$

We can write in a simplified way:

$$\sum_{j=1}^n a(j)$$

$$b(7) + b(9) + b(11) + \dots + b(51)$$

can be simplified to:

$$\sum_{j=4}^{26} b(2j-1)$$

$$c(8) - c(10) + c(12) - c(14) + \dots - c(78)$$

$$\sum_{i=4}^{39} (-1)^i * c(2i)$$