Exercise 2

In the following exercises, use the rules for sums of powers of integers to compute the sums.

$$\sum_{i=5}^{10} i$$

Solution

$$\sum_{i=5}^{10} i = \sum_{i=1}^{10} i - \sum_{i=1}^{4} i$$

$$= \frac{10(10+1)}{2} - \frac{4(4+1)}{2}$$

$$= 5(11) - 2(5)$$

$$= 55 - 10$$

$$= 45$$