Sequences and Series SS6: Sigma Notation

Write the terms of the series and evaluate the partial sum

1. $\sum_{n=1}^{4} 5 + 3(n-1)$

2. $\sum_{j=1}^{5} 5 \cdot 3^{j-1}$

3. $\sum_{k=3}^{5} 3 - 2(k-1)$

4. $\sum_{n=4}^{7} 2 \cdot 2^{n-1}$

5. $\sum_{n=1}^{4} n^2$

Write the given series in sigma notation

6. 2 + 6 + 10 + 14 + 18 + 22 + 26 + 30

7. 1 + 3 + 5 + 7 + … + 25

8. 3 + 9 + 27 + …

9. 100 + 95 + 90 + … + 70

10. 3 + 4 + 5 + 6 + 7 + … + 99