

Sigma Notation: Answers

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Summary

tbc

Q1:

1.1: 110 1.2: 65 1.3: 54 1.4: 225 1.5: 455 1.6: 8 1.7: 6j

Q2:

2.1 limit: 4 start: 1 rhs: $3i$ 2.2 limit: 4 start: 1 rhs: $-i$ 2.3 limit: 4 start: 0 rhs: 3^i 2.4 limit: 5 start: 1 rhs: 1 2.5 limit: 4 start: 1 rhs: $(-1)^{i+1}6i$ 2.6 limit: 4 start: 1 rhs: $4i$ 2.7 limit: 5 start: 1 rhs: $5i$

Q3:

3.1 $2 * \{\text{limit: } n \text{ start: } 1 \text{ rhs: } i\}$ 3.2 $4 * \{\text{limit: } n \text{ start: } 1 \text{ rhs: } i\}$ 3.3 $12 * \{\text{limit: } 5 \text{ start: } 1 \text{ rhs: } i\}$ 3.4 limit: n start: 1 rhs: i

Q5:

5.1: $2 \sum_{i=1}^n i^2 - \sum_{i=1}^n i - n$ 5.2: $\sum_{i=1}^n i^3 + 9 \sum_{i=1}^n i^2 + 18 \sum_{i=1}^n i$ 5.3 $6 \sum_{i=1}^n i^3 - 7 \sum_{i=1}^n i^2 - 3 \sum_{i=1}^n i$