Answer key

The method: Sigma notation

Σ means add. Put in each value of k from the bottom number to the top number, then add the results.

$$\sum_{k=1}^{5} (5k + 2) = 85$$

$7 + 12 + 17 + 22 + 27 = 85$ put in k = 1, 2, ..., 5 and add

$$\sum_{k=0}^{8} k^2 = 204$$

$0 + 1 + 4 + 9 + 16 + 25 + 36 + 49 + 64 = 204$ put in k = 0, 1, ..., 8 and add

$$\sum_{k=1}^{6} 3^k = 1092$$

$3 + 9 + 27 + 81 + 243 + 729 = 1092$ put in k = 1, 2, ..., 6 and add

Problems 1 and 2 worked out · Version 0A

$$\sum_{k=0}^{4} 3^k = 121$$

$1 + 3 + 9 + 27 + 81 = 121$ put in k = 0, 1, ..., 4 and add

$$\sum_{k=2}^{8} (k^2 + 1) = 210$$

$5 + 10 + 17 + 26 + 37 + 50 + 65 = 210$ put in k = 2, 3, ..., 8 and add

Sigma notation · Version 0A

1) 121 2) 210 3) −66 4) 1092 5) 35 6) 105
7) 20 8) −28 9) 34 10) 30 11) −56 12) 124
13) 212 14) 62 15) 40 16) 50 17) 147 18) 110
19) 29 20) 30 21) 213 22) 50 23) 363 24) −54
25) 39 26) 126 27) −70 28) 64 29) 280
30) 280