**3A Summations**

1. Calculate the sum of the series indicated below:

Splitting up Series:

1. Show that:

Can be written as:

1. Evaluate
2. Show that
3. Hence, calculate the value of:

**3B Quadratic & Cubic Series**

1. Evaluate
2. Find
3. Verify that the result is correct for n = 1, 2 and 3
4. Show that:
5. Hence, calculate the sum of the series:

4 + 10 + 18 + 28 + 40 … … … + 418

1. Find a formula for the sum of the series: