**2A Method of Differences**

1. Show that:
2. Hence, prove using the method of differences that:
3. Verify that

And hence find the following using the method of differences:

1. Find the following summation using the method of differences:
2. Express the following using partial fractions:
3. Hence prove, by the method of differences, that:

Where a and b are constants to be found.

1. Find the value of the following to 5 decimal places: