

Hint for Problem 211-c

You may run into a product of the form $\sum_{i=0}^{\infty} a^i x^i \sum_{j=0}^{\infty} b^j x^j$. Note that in the product, the coefficient of x^k is $\sum_{i=0}^k a^i b^{k-i} = b^k \sum_{i=0}^k \frac{a^i}{b^i}$.