## Hint for Problem 188

Fro the last two questions, try multiplying out something simpler first, say

$$
\left(a_{0}+a_{1} x+a_{2} x^{2}\right)\left(b_{0}+b_{1} x+b_{2} x^{2}\right)
$$

. If this problem seems difficult the part that seems to cause students the most problems is converting the expression they get for a product like this into summation notation. If you are having this kind of problem, expand the product $\left(a_{0}+a_{1} x+a_{2} x^{2}\right)\left(b_{0}+b_{1} x+b_{2} x^{2}\right)$ and then figure out what the coefficient of $x^{2}$ is. Try to write that in summation notation.

