

**2) (10 pts) ANL (Summations)**

a) (5 pts) Determine the value of the following summation, in terms of  $n$ :  $\sum_{i=1}^{2n} (4i + 7)$ . Express your final answer as a polynomial in the form  $an^2 + bn$ , where  $a$  and  $b$  are integers.

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b) (5 pts) Determine the value of the summation below:

$$\sum_{i=21}^{100} (3i + 1)$$

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