Assignment 4 – Part 2
Set 5.1 - 21, 60

21. $\sum_{m=0}^{3} \frac{1}{2^m}$

21.)$= \frac{\mathbf{1}}{\mathbf{2^0}} + \frac{\mathbf{1}}{\mathbf{2^1}} + \frac{\mathbf{1}}{\mathbf{2^2}} + \frac{\mathbf{1}}{\mathbf{2^3}}$

$= \frac{\mathbf{1}}{\mathbf{1}} + \frac{\mathbf{1}}{\mathbf{2}} + \frac{\mathbf{1}}{\mathbf{4}} + \frac{\mathbf{1}}{\mathbf{8}}$

$= \frac{\mathbf{15}}{\mathbf{8}}$

60. $2 \cdot \sum_{k=1}^{n}(3k^2 + 4) + 5 \cdot \sum_{k=1}^{n}(2k^2 - 1)$

60.) $= \sum_{k=1}^{n} 2(3k^2 + 4) + \sum_{k=1}^{n} 5(2k^2 - 1)$

$= \sum_{k=1}^{n} 2(3k^2 + 4) + 5(2k^2 - 1)$

$= \sum_{k=1}^{n} 6k^2 + 8 + 10k^2 - 5$

$= \sum_{k=1}^{n} 16k^2 + 3$