

Module 12 Classwork 2 Name: _____ Date: _____ Pd: _____

1. Evaluate $\sum_{k=1}^4 2^k - k$

2. Find S_{82} for $-1 + 22 + 45 + 68 + \dots$

3. Evaluate $\sum_{k=1}^{46} 5k + 3$

4. Find the infinite sum for $4 + 2 + 1 + \frac{1}{2} + \frac{1}{4} + \dots$

5. Find n if $S_n = 300$ for the arithmetic sequence 3, 9, 15, 21, ...

6. Find S_6 for the following geometric sequence $a_n = \frac{1}{32}(-2)^{n-1}$. (Use the formula)