1. Find the sum of the first 60 terms of the sequence defined by $a_n = 5n + 2$.

2. Find the sum of the first 40 terms of an arithmetic sequence in which $a_1 = 3$ and d = 5.

3. Find the sum of the first 35 terms of the sequence defined by $a_{n+1} = a_n + 4$ where $a_1 = 10$.

4. Find the sum of the first 60 terms of the sequence 1, 1.3, 1.6, 1.9, ...

5. Evaluate the series 5 + 8 + 11 + 14 + ... + 200.

Algebra 2 Class Worksheet #5 Unit 9 page 2

Solve each of the following problems. Show your work neatly organized.

6. Evaluate: $\sum_{i=1}^{60} (3i + 7)$

7. An object accelerates in such a way that it travels 2 feet during the first second, 5 feet during the next second, and 8 feet during the third second. If this pattern continues, then how far will the object have moved during the first 30 seconds?

8. A job has a starting salary of \$29,000 with a guaranteed increase of \$500 per year. Find the total salary for the first 18 years.