Sequences and Arithmetic Sequences - Worksheet

NAME:
DATE:

1. Find the first five terms of the sequence $\{a_n\}$ where $a_n = (-1)^n n(n-1)$.

2. Find the sum
$$\sum_{i=1}^{5}(i^2 - 1).$$

3. Show that the sequence $\log 2^n$ is arithmetic and find its common difference.

4. Use the given information to find a_1 and a formula for a_n.
$$a_3 = 2, a_7 = 14$$

5. Find the 9th partial sum of the arithmetic sequence $\{a_n\}$ if $a_1 = 1$ and $d = -4$.