## Sequences and Arithmetic Sequences - Worksheet

NAME:
DATE:

1. Find the first five terms of the sequence $\left\{a_{n}\right\}$ where $a_{n}=(-1)^{n} n(n-1)$.
2. Find the sum

$$
\sum_{i=1}^{5}\left(i^{2}-1\right)
$$

3. Show that the sequence $\log 2^{n}$ is arithmetic and find its common difference.
4. Find the 9 th partial sum of the arithmetic sequence $\left\{a_{n}\right\}$ if $a_{1}=1$ and $d=-4$.
