Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Period\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Geometric Infinite sums formula: $S\_{n}=\frac{a\_{1}(1-r^{n})}{1-r}$

Use the formula for the sum of a geometric series to find the sum of the first five terms in each series. ( n = 5)

$$1. a\_{n}=36(23)^{n-1}$$

2. $a\_{n}=9\left(-2\right)^{n-1}$

3. $a\_{n}=5(-1)^{n-1}$

4. $a\_{n}=825(52)^{n-1}$

5. $a\_{n}=23(-34)^{n-1}$