Name _____ Date _____
Mr. Schlansky Algebra II

Finding the Sum of a Geometric Series (Explicit Notation)

1. Write an explicit equation to find the sum of the first n terms of the sequence 3+6+12+24…
Use your formula to find the sum of the first ten terms.

2. Write an explicit equation to find the sum of the first n terms of the series 3+15+75+375 + …
Use your formula to find the sum of the first eight terms.

3. Write an explicit equation to find the sum of the first n terms of the sequence
4 - 12 + 36, -108…
Use your formula to find the sum of the first twelve terms.

4. Write an explicit equation to find the sum of the first n terms of the series $\frac{1}{4}+\frac{1}{2}+1+2+\ldots$
Use your formula to find the sum of the first nine terms.

5. Write an explicit equation to find the sum of the first n terms of the sequence 1- 3 + 9 - 27…
Use your formula to find the sum of the first sixteen terms.

6. Write an explicit equation to find the sum of the first n terms of the series **-** 4 – 8 **-** 16 – 32 **-** …
Use your formula to find the sum of the first twenty terms.

7. Write an explicit equation to find the sum of the first n terms of the sequence
128 + 64 + 32 + 16…
Use your formula to find the sum of the first eighteen terms.

8. Write an explicit equation to find the sum of the first n terms of the series **7** – 42 + 252 – 1512 + …
Use your formula to find the sum of the first fifteen terms.

9. Write an explicit equation to find the sum of the first n terms of the sequence $\frac{1}{16} - \frac{1}{4} + 1 - 4...$
Use your formula to find the sum of the first ten terms.

10. Write an explicit equation to find the sum of the first n terms of the sequence
3 – 12 + 48 – 192 + …
Use your formula to find the sum of the first thirteen terms.