Name _____ Date _____
Mr. Schlansky Algebra II

Finding the Sum of a 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.