Writing Recursive Formulas

Directions: Write a recursive formula for each geometric sequence. Show all work.

1. Write a recursive formula to represent the sequence $5,\ 10,\ 20,\ 40,\ ....$

2. Write a recursive formula to represent the sequence $3,\ 12,\ 48,\ 192,\ ....$

3. Write a recursive formula to represent the sequence $72,\ 36,\ 18,\ 9,\ ....$

4. Write a recursive formula to represent the sequence $81,\ 27,\ 9,\ 3,\ ....$

5. Write a recursive formula to represent the sequence $6,\ -12,\ 24,\ -48,\ ....$

6. Write a recursive formula to represent the sequence $64,\ -32,\ 16,\ -8,\ ....$

7. Write a recursive formula to represent the sequence $-4,\ -12,\ -36,\ -108,\ \ldots$.

8. Write a recursive formula to represent the sequence $160,\ 40,\ 10,\ \frac{5}{2},\ \ldots$.

9. Write a recursive formula to represent the sequence $7,\ \frac{14}{3},\ \frac{28}{9},\ \frac{56}{27},\ \ldots$.

10. Write a recursive formula to represent the sequence $2,\ 10,\ 50,\ 250,\ \ldots$.

11. Write a recursive formula to represent the sequence $-9,\ 3,\ -1,\ \frac{1}{3},\ \ldots$.

12. Write a recursive formula to represent the sequence $12,\ 18,\ 27,\ \frac{81}{2},\ \ldots$.