Geometric or Not

Directions: Determine whether each sequence is geometric. If it is, find the common ratio. Show all work.

1. Determine whether the sequence is geometric. If it is, find the common ratio: $2,\ 6,\ 18,\ 54,\ \ldots$

2. Determine whether the sequence is geometric. If it is, find the common ratio: $4,\ 8,\ 12,\ 16,\ \ldots$

3. Determine whether the sequence is geometric. If it is, find the common ratio: $100,\ 50,\ 25,\ \frac{25}{2},\ \ldots$

4. Determine whether the sequence is geometric. If it is, find the common ratio: $3,\ 6,\ 12,\ 21,\ \ldots$

5. Determine whether the sequence is geometric. If it is, find the common ratio: $7,\ -14,\ 28,\ -56,\ \ldots$

6. Determine whether the sequence is geometric. If it is, find the common ratio: $1,\ 4,\ 9,\ 16,\ \ldots$

7. Determine whether the sequence is geometric. If it is, find the common ratio: $81,\ 27,\ 9,\ 3,\ \ldots$

8. Determine whether the sequence is geometric. If it is, find the common ratio: $5,\ 10,\ 25,\ 50,\ \ldots$

9. Determine whether the sequence is geometric. If it is, find the common ratio: $-2,\ 6,\ -18,\ 54,\ \ldots$

10. Determine whether the sequence is geometric. If it is, find the common ratio: $64,\ -32,\ 16,\ -8,\ \ldots$

11. Determine whether the sequence is geometric. If it is, find the common ratio: $6,\ 9,\ \frac{27}{2},\ \frac{81}{4},\ \ldots$

12. Determine whether the sequence is geometric. If it is, find the common ratio: $12,\ 8,\ 4,\ 2,\ \ldots$