

## Comparing Arithmetic and Geometric Sequences

For each sequence, state if it is arithmetic, geometric, or neither.

1) 1, 3, 6, 10, 15, ...

2) 40, 43, 46, 49, 52, ...

3)  $4, \frac{13}{3}, \frac{14}{3}, 5, \frac{16}{3}, \dots$

4) -4, 12, -36, 108, -324, ...

5) 4, 16, 36, 64, 100, ...

6) -29, -34, -39, -44, -49, ...

7) 1, 5, 25, 125, 625, ...

8) 1, 4, 9, 16, 25, ...

9) -34, -26, -18, -10, -2, ...

10) 0, 3, 8, 15, 24, ...

11)  $a_n = -163 + 200n$

12)  $a_n = 16 + 3n$

13)  $a_n = -4 \cdot (-3)^{n-1}$

14)  $a_n = -\frac{3}{4} + \frac{3}{2}n$