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

1) 1, −3, 9, −27, 81, ...

2) −36, −30, −24, −18, −12, ...

3) 23, 123, 223, 323, 423, ...

4) −3, −1, 2, 6, 11, ...

5) −1, −4, −16, −64, −256, ...

6) 18, 118, 218, 318, 418, ...

7) \( a_n = -22 + 9n \)

8) \( a_n = 12 - 4n \)

9) \( a_n = 4 \cdot (-2)^{n-1} \)

10) \( a_n = -3 + 20n \)

11) \( a_n = 2^n + 3 \)

12) \( a_n = (2n - 1)^2 \)

Find the first four terms in each sequence.

13) \( a_{n+1} = a_n \cdot 6 \)

\[ a_1 = 1 \]

14) \( a_{n+1} = a_n + 2 \)

\[ a_1 = -26 \]

15) \( a_{n+1} = na_n \)

\[ a_1 = 2 \]

16) \( a_{n+1} = a_n + 100 \)

\[ a_1 = -6 \]

17) \( a_{n+1} = \frac{2 + a_n}{2} \)

\[ a_1 = -14 \]

18) \( a_{n+1} = a_n \cdot 6 \)

\[ a_1 = -3 \]
Answers to Class Review 1 (ID: 1)

<p>| | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Geometric</td>
<td>2</td>
<td>Arithmetic</td>
<td>3</td>
</tr>
<tr>
<td>5</td>
<td>Geometric</td>
<td>6</td>
<td>Arithmetic</td>
<td>7</td>
</tr>
<tr>
<td>9</td>
<td>Geometric</td>
<td>10</td>
<td>Arithmetic</td>
<td>11</td>
</tr>
<tr>
<td>13</td>
<td>1, 6, 36, 216</td>
<td>14</td>
<td>−26, −24, −22, −20</td>
<td>15</td>
</tr>
<tr>
<td>16</td>
<td>−6, 94, 194, 294</td>
<td>17</td>
<td>−14, −6, −2, 0</td>
<td>18</td>
</tr>
</tbody>
</table>