Name: $\qquad$ Period: $\qquad$

## HW 3-6 HONORS: Finding Missing Terms



Each of the tables below represents an arithmetic sequence. Find the missing terms in the sequence, showing your method.
1.

| $\boldsymbol{x}$ | 1 | 2 | 3 |
| :---: | :---: | :---: | :---: |
| $\boldsymbol{y}$ | 3 |  | 12 |

2. 

| $x$ | $y$ |
| :---: | :---: |
| 1 | 2 |
| 2 |  |
| 3 |  |
| 4 | 26 |

3. 

| $x$ | $y$ |
| :---: | :---: |
| 1 | 24 |
| 2 |  |
| 3 | 6 |
| 4 |  |

4. 

| $x$ | $y$ |
| :---: | :---: |
| 1 | 16 |
| 2 |  |
| 3 |  |
| 4 | 4 |
| 5 |  |

Determine whether the sequence is Arithmetic, Geometric or Neither.
Then determine the recursive and explicit equations for each (if the sequence is not arithmetic or geometric, try your best).
5. $5,9,13,17, \ldots$ This sequence is: Arithmetic Geometric Neither

Recursive Equation: $\qquad$ Explicit Equation: $\qquad$
6. $60,30,0,-30, \ldots$ This sequence is: Arithmetic Geometric Neither

Recursive Equation: $\qquad$ Explicit Equation: $\qquad$
7. 60, 30, 15, $\frac{15}{2}, \ldots$ This sequence is: Arithmetic Geometric Neither
$\qquad$ Explicit Equation: $\qquad$

Determine whether the sequence is Arithmetic, Geometric or Neither.
Then determine the recursive and explicit equations for each (if the sequence is not arithmetic or geometric, try your best).
8.

(The number of black tiles above) This sequence is: Arithmetic Geometric Neither

Recursive Equation: $\qquad$ Explicit Equation: $\qquad$
9. $4,7,12,19, \ldots$

This sequence is:
Arithmetic
Geometric
Neither

Recursive Equation: $\qquad$ Explicit Equation: $\qquad$

Each of the tables below represents a geometric sequence. Find the missing terms in the sequence, showing your method.
10.

| $\boldsymbol{x}$ | 1 | 2 | 3 |
| :---: | :---: | :---: | :---: |
| $\boldsymbol{y}$ | 3 |  | 12 |

11. 

| $x$ | $y$ |
| :---: | :---: |
| 1 | 2 |
| 2 |  |
| 3 |  |
| 4 | 54 |

12. 

| $x$ | $y$ |
| :---: | :---: |
| 1 | 5 |
| 2 |  |
| 3 | 20 |
| 4 |  |

13. 

| $x$ | $y$ |
| :---: | :---: |
| 1 | 4 |
| 2 |  |
| 3 |  |
| 4 |  |
| 5 | 324 |

Determine whether each graph represents an Arithmetic of Geometric sequence. Then, find the recursive and explicit equation.
14.

15.


Determine whether each graph represents an Arithmetic of Geometric sequence. Then, find the recursive and explicit equation.

17.


