Name $\qquad$ Period $\qquad$
Below are some of the tables created for different attributes of a figure created with toothpicks. For each of the tables do the following:
a) Determine if linear or quadratic and label it.
b) Determine the equation if you can and write it next to it also.

1. | Step | Perimeter |
| :---: | :---: |
| 1 | 4 |
| 2 | 10 |
| 3 | 16 |
| 4 | 22 |
| 5 | 28 |
|  |  |
2. 

| Step | Area Missing <br> from Rectangle |
| :---: | :---: |
| 1 | 0 |
| 2 | 2 |
| 3 | 6 |
| 4 | 12 |
| 5 | 20 |
|  |  |

3. 

| Step | Toothpicks |
| :---: | :---: |
| 1 | 4 |
| 2 | 13 |
| 3 | 26 |
| 4 | 43 |
| 5 | 64 |
|  |  |

4. 

| Step | Bottom Row |
| :---: | :---: |
| 1 | 1 |
| 2 | 3 |
| 3 | 5 |
| 4 | 7 |
| 5 | 9 |
|  |  |

5. 

| Step | Area (total <br> squares) |
| :---: | :---: |
| 1 | 1 |
| 2 | 4 |
| 3 | 9 |
| 4 | 16 |
| 5 | 25 |
|  |  |

6. 

| Step | Toothpics Added |
| :---: | :---: |
| 1 |  |
| 2 | 9 |
| 3 | 13 |
| 4 | 17 |
| 5 | 21 |

7. 

| Step | Number of Right <br> Angles |
| :---: | :---: |
| 1 | 4 |
| 2 | 18 |
| 3 | 40 |
| 4 | 70 |
| 5 | 108 |

8. 

| Step | Squares Added |
| :---: | :---: |
| 1 | 1 |
| 2 | 3 |
| 3 | 5 |
| 4 | 7 |
| 5 | 9 |

