Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Directions:** Marissa and Doug are given two tables of values (shown below). They are told one is a linear equation and one is an exponential equation. Marissa thinks that table A is exponential and table B is linear, while Doug thinks table A is linear and table B is exponential. Who is correct? Construct a mathematical argument to convince a classmate.

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Table A**   |  |  | | --- | --- | | **X** | **Y** | | -2 | 6 | | -1 | 8 | | 0 | 10 | | 1 | 12 | | 2 | 14 | | **Table B**   |  |  | | --- | --- | | **X** | **Y** | | 0 | 1 | | 1 | 2 | | 2 | 4 | | 3 | 8 | | 4 | 16 | |