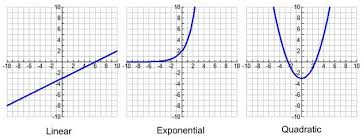
**Algebra 2**, Unit 9: Quadratics **#25b**

**Day 25: Linear vs. Exponential vs. Quadratic**

**Look closely at these TABLES. Describe any patterns you notice.**

|  |  |
| --- | --- |
| These have a linear relationship:    Describe patterns: | These have an exponential relationship:    Describe patterns: |
| These have a quadratic relationship: | Explain how you can identify if a relationship is linear, exponential, or linear from a table of values? |

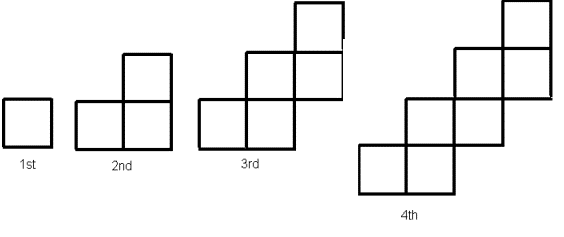
**Look closely at these GRAPHS.**

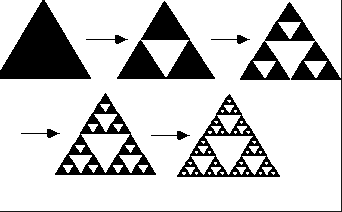


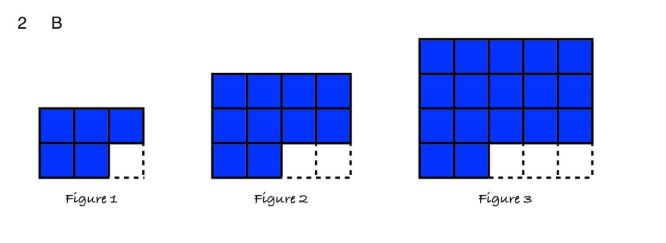
Explain how you can tell if a graph is linear, exponential, or quadratic.

**Equations**

|  |  |  |
| --- | --- | --- |
| These are linear equations:  y =  2x + 3y = -15  x = 5 | These are exponential equations: | These are quadratic equations: |
| Explain how you can tell if an equation is linear, exponential, or quadratic. | | |

**Look closely at TILE PATTERNS. Figure out which is linear, exponential, and quadratic.**





**Explain how you can tell if a TILE PATTERN is linear, exponential, or quadratic.**

**Bonus: Write a rule for each pattern. Describe what the variables in your rule stand for.**

**Spicy Bonus: Which pattern will exceed 10,000 first? How do you know? What about last?**