1. $y=5∙3^{x}$

Initial Value: \_\_\_\_\_\_\_\_\_\_

Constant Ratio: \_\_\_\_\_\_\_\_\_\_\_

Asymptote: \_\_\_\_\_\_\_\_\_\_\_\_

Growth or Decay? Explain how you know.

1. $y=\frac{2}{5}^{x}$

Initial Value: \_\_\_\_\_\_\_\_\_\_

Constant Ratio: \_\_\_\_\_\_\_\_\_\_\_

Asymptote: \_\_\_\_\_\_\_\_\_\_\_\_

Growth or Decay? Explain how you know.

|  |  |
| --- | --- |
| **x** | **y** |
| -2 | 81 |
| -1 | 27 |
| 0 | 9 |
| 1 | 3 |

1. Write an equation for the exponential functions below:

1. Write an equation for the exponential functions below:

|  |  |
| --- | --- |
| **x** | **y** |
| -2 | 58 |
| -1 | 101.5 |
| 0 | 177.625 |
| 1 | 310.844 |

1. **Graph the function below**

$$y=2∙2^{x}$$

**Complete the table
and plot the 5 points
on the graph.**

|  |  |
| --- | --- |
| **X** | **Y** |
| -2 |  |
| -1 |  |
| 0 |  |
| 1 |  |
| 2 |  |

|  |  |
| --- | --- |
| **x** | **y** |
| -2 | 72 |
| -1 | 67 |
| 0 | 62 |
| 1 | 57 |

1. Linear or exponential? Explain your reasoning.

|  |  |
| --- | --- |
| **x** | **y** |
| -1 | 43 |
| 0 | 34.4 |
| 1 | 27.52 |
| 2 | 22.016 |

1. Linear or exponential? Explain your reasoning.

1. Linear or exponential? Explain your reasoning.

**Sarah has $500 in her savings account. Each week she takes out $10 and mails it to the Jonas Brothers Fan Club President.**