NAME: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**12.4.17 IN Class: COMPARING TWO DIFFERENT FUNCTIONS**

1.) Compare which function has a greater rate of change.

** Graphical Algebraic**

y = 2x

Find the slope of each function:

Graphical:

Algebraic:

Which function has a greater rate of change? Graphical or Algebraic

Explain why. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

2.) Compare which function has a greater rate of change.

|  |  |
| --- | --- |
| **x** | **y** |
| 2 | 9.6 |
| 3 | 14.4 |
| 4 | 19.2 |
| 5 | 24 |
| 6 | 28.8 |

**Table Algebraic**

y = 4.9x

Find the slope of each function:

Table:

Algebraic:

Which function has a greater rate of change? Table or Algebraic

Explain why. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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3.) Compare which function has a greater rate of change.

**Verbal Algebraic**

This function adds 2 to the input. y = 2x

Find the slope for each function:

Which function has a greater rate of change? Verbal or Algebraic

Explain why. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

4.) Compare which function has a greater rate of change.

|  |  |
| --- | --- |
| **x** | **y** |
| 2 | 6 |
| 3 | 9 |
| 4 | 12 |
| 5 | 15 |
| 6 | 18 |

**Graphical Table**

Find the slope for each function:

Which function has a greater rate of change? Graphical or Table

Explain why. Include the unit rate for each representation in your explanation.

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