**Day One: Linear and Exponential Group Test**

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| 1. *Directions*: Make a perfect graph of the number of people who walk to school.   |  |  | | --- | --- | | x (year) | y (number of people) | | 0 | 3 | | 1 | 7 | | 2 | 5 | | 3 | 10 | | 4 | 13 | |
| 2. Use colors, numbers, words, and arrows to show growth rate and starting number in all of these representations.     |  |  | | --- | --- | | x | y | | 0 | 2 | | 1 | 3 | | 2 | 4.5 | | 3 | 6.75 | |
| 3. *Directions*: Sarah evaluated this function: y = 5x + 4 for x = 2. Explain her steps.  *“First, \_\_\_\_\_\_\_\_\_\_.” “Next, \_\_\_\_\_\_\_\_\_.” “Then, \_\_\_\_\_\_\_\_.” “Finally, \_\_\_\_\_\_\_\_.”*   |  |  | | --- | --- | | y = 5x + 4 |  | | y = (5)(2) + 4 |  | | y = 10 + 4 |  | | y = 14 |  | |

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| 4. *Directions*: Here is a table, graph and equation. Ms. Tara says it is an exponential function. Ms. Jess says it is a linear function.  Who is correct? Why?  *“\_\_\_\_\_\_\_ is correct because \_\_\_\_\_\_\_\_.”*  y = 2(3)x   |  |  | | --- | --- | | **x** | **y** | | 0 | 2 | | 1 | 6 | | 2 | 18 | | 3 | 54 | | 4 | 162 | | 5 | 486 |   \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| 5. This graph shows the temperature in the country Albania each month.  Temperature in Albania  Months  Temperature in °C  This data is not perfect, but the equation is close. Use the equation to make a prediction for the temperature in July.  *I think the temperature in July will be \_\_\_\_\_\_\_ because …*  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  Can we use this equation to make a prediction for December? Why or why not?  *I think we \_\_\_\_\_\_\_\_\_\_\_ use the equation to make a prediction for December because…*  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |

**Day 2: Linear and Exponential Test Checklist Box**

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| **Question One**   * Three titles, x and y, arrows on axes * Good numbers * Points are correct   **Question Two**   * Colors show growth and starting number * Two colors on the graph, equation, table   **Question Three**   * Explain where the x number comes from * Explains multiplying * Math words: *first, next, then, finally, add, multiply, equation*   **Question Four**   * Exponential is correct * Explains table, graph, equation * Uses math words: *curved, adding, table, graph, equation, exponent*   **Question Five**   * Uses equation to get a number for July * Explains calculation * Explains December |

**Day 2: Linear and Exponential Test Review**

1. Make a dictionary to use on the test

**Say**: *“Let’s look at Question 1. Are there any words you don’t know?”*

**Do**: Write and translate into ML words you do not know on the test.

**Repeat** this for all the questions.



Call the teacher when everyone is done!

*“Excuse me, we are done!”*

1. Make a perfect test

**Say**: *“What did you get for number 1? Do we agree?”*

**Do**: If you disagree, look at both papers and talk until you agree.

**Say: “***What do we need to write to get a 4?”*

**Do**: Read the checklist box. To get a “4,” check ALL the boxes. If you do not have all the boxes, make a perfect answer. If you have all the boxes, go to the next question.

**Repeat** this for all the questions.



Call the teacher when everyone is done!

*“Excuse me, we are done!”*

1. Check your writing: periods for each sentence, capital letters for each sentence

**Say**: *“Can I check your work? Do you have periods and capital letters?”*

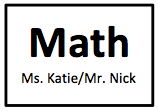
**Do**: Check that all words are in English. Check that every sentence has a capital letter and a period.

**Repeat** this for all the questions.



Call the teacher when everyone is done!

*“Excuse me, we are done!”*

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**Day 2: Linear and Exponential Test Dictionary**

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**Day 3: Exponential and Linear Functions - Individual Test**

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| 1. *Directions*: Make a perfect graph of the number of people who take the bus to school.   |  |  | | --- | --- | | x (month) | y (number of people) | | 0 | 17 | | 1 | 27 | | 2 | 34 | | 3 | 12 | | 4 | 22 | |
| 2. Use colors, numbers, words, and arrows to show growth rate and starting number in all of these representations.     |  |  | | --- | --- | | x | y | | 0 | 4 | | 1 | 8 | | 2 | 16 | | 3 | 32 | |
| 3. *Directions*: Sarah evaluated this function: y = 3(6)x for x = 2. Explain her steps.  *“First, \_\_\_\_\_\_\_\_\_\_.” “Next, \_\_\_\_\_\_\_\_\_.” “Then, \_\_\_\_\_\_\_\_.” “Finally, \_\_\_\_\_\_\_\_.”*   |  |  | | --- | --- | | y = 3(6)x |  | | y = 3(6)2 |  | | y = 3(66) |  | | y = 3(36) |  | | y = 108 |  | |

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| 4. *Directions*: Here is a table, graph and equation. Ms. Tara says it is an exponential function. Ms. Jess says it is a linear function.  Who is correct? Why?  *“\_\_\_\_\_\_\_ is correct because \_\_\_\_\_\_\_\_.”*  y = 2 + 3x   |  |  | | --- | --- | | **x** | **y** | | 0 | 2 | | 1 | 5 | | 2 | 8 | | 3 | 11 | | 4 | 14 | | 5 | 17 |   \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| 5. This graph shows the **rainfall** in San Francisco each month.  0 1 2 3 4 5 6 7 8 9 10 11  months  This data is not perfect, but the equation is close. Use the equation to make a prediction for the temperature in July.  *I think the rainfall in July will be \_\_\_\_\_\_\_ because …*  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  Can we use this equation to make a prediction for December? Why or why not?  *I think we \_\_\_\_\_\_\_\_\_\_\_ use the equation to make a prediction for December because…*  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |