CMIC 1 – Linear Functions without Context Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

U3L1I1c HW Date\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

For the following equations, fill in the table, graph the given function, write a NOW-NEXT rule and answer any additional questions. This is focusing on the relationships between tables of values, graphs and symbolic rules for linear equations.

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 1) | $$y=3x-4$$ |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| X | -1 | 0 | 1 | 2 | 3 | 4 |
| y |  |  |  |  |  |  |

 |  |
|  |  | NOW-NEXT Rule: |
|  | 1. Label the coordinates of three points A, B and C on the graph. Calculate the slopes of the segments between points *A* and *B*, between points *B* and *C*, and between points *A* and *C*.
 |
|  |  | *Slope between A and B:* | *Slope between B and C:* | *Slope between A and C:* |
|  |  | $$\frac{∆y}{∆x}=$$ | $$\frac{∆y}{∆x}=$$ | $$\frac{∆y}{∆x}=$$ |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 2) | $$y=\frac{1}{2}x+2$$ |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| X | -1 | 0 | 1 | 2 | 3 | 4 |
| y |  |  |  |  |  |  |

 |  |
|  |  | NOW-NEXT Rule: |
|  | 1. Locate the y-intercept on the graph. What are the coordinates of the y-intercept for this equation?
 |

3) Determine if the following situation is a linear relationship. Provide evidence of your thinking.

*If a race car averages 150 miles per hour, the distance d covered is a function for driving time t.*

U3L1I1 – CYU Handout Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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| --- | --- |
| **Spring 1** | **Spring 2** |
|  | Coordinates of the y-intercept:Slope of the line plotted: |
| Coordinates of the y-intercept:Slope of the line plotted: |
| **Spring 3** | **Spring 4** |
|  Coordinates of the y-intercept:Slope of the line plotted: |  Coordinates of the y-intercept:Slope of the line plotted: |