**Linear Equations - Introduction**

Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date \_\_\_\_\_\_\_\_\_\_\_\_\_\_ Hour \_\_\_\_\_\_\_\_\_\_\_

*Complete each of the tables below. Then, graph the points on the coordinate graph provided.*

1. $y=2x+1$

|  |  |
| --- | --- |
| x | y |
| -2 |  |
| -1 |  |
| 0 |  |
| 1 |  |
| 2 |  |

2. $y=-2x+1$



|  |  |
| --- | --- |
| x | y |
| -2 |  |
| -1 |  |
| 0 |  |
| 1 |  |
| 2 |  |

3. What similarities / differences do you notice?

4. $y=-3x+5$

|  |  |
| --- | --- |
| x | y |
| -2 |  |
| -1 |  |
| 0 |  |
| 1 |  |
| 2 |  |

5. $y=-3x-5$

|  |  |
| --- | --- |
| x | y |
| -2 |  |
| -1 |  |
| 0 |  |
| 1 |  |
| 2 |  |

6. What similarities / differences do you notice?

7. $y=\frac{1}{2}x-4$

|  |  |
| --- | --- |
| x | y |
| -2 |  |
| -1 |  |
| 0 |  |
| 1 |  |
| 2 |  |

8. $y=2x-4$

|  |  |
| --- | --- |
| x | y |
| -2 |  |
| -1 |  |
| 0 |  |
| 1 |  |
| 2 |  |

9. What similarities / differences do you notice?

10. What effect did the number in front of the x-variable have on the graph and table?

11. What effect did the number without the x-variable have on the graph and table?

12. What do you think makes a relationship linear?