Math 9 **Linear Relations** Notes

A ***linear relation*** is an equation which defines the relationship between two variables. Those variables, usually *x* and *y*, represent real life applications or situations. A linear relation can then be graphed as a line, and the picture can be used to predict or determine future values. In a linear relation, a constant change in one quantity produces a constant change in the related quantity.

A ***table of values*** is a useful tool that can help determine specific coordinates on a linear relation for graphing and information purposes.

Examples:

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







|  |  |
| --- | --- |
| ***x*** | ***y*** |
| 3 |  |
| 2 |  |
| 0 |  |
| -2 |  |
| -3 |  |



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



|  |  |
| --- | --- |
| ***x*** | ***y*** |
| 4 |  |
| 2 |  |
| 0 |  |
| -2 |  |
| -4 |  |



|  |  |
| --- | --- |
| ***x*** | ***y*** |
| 6 |  |
| 3 |  |
| 0 |  |
| -3 |  |
| -6 |  |

