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| UNIT 1 NOTES |
| *Graphing*Graphs – a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ illustrating the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ between two or more \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ being studiedComponents – all graphs should include the following:* Title – written as \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ vs. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ variable

Location: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_* Dependent variable – the variable that \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Location: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_* Independent variable – the variable that is \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Location: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_* Slope – the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Symbol: \_\_\_\_\_\_\_\_\_\_\_\_*Finding the Slope*Equation for a straight line – allows you to examine the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ between \_\_\_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_\_\_Equation: \_\_\_\_\_\_\_\_\_\_\_\_\_\_y-intercept – where the line crosses the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Symbol: \_\_\_\_\_\_\_\_\_\*most of the time this should be “\_\_\_\_\_\_\_” *Making graphs*Scale – to set up the scale for both axes * Increments must be \_\_\_\_\_\_\_\_\_\_\_\_\_\_ within an axis but both axis don’t have to have the same increments
* Not all graphs have a \_\_\_\_\_\_\_\_\_\_\_\_\_\_
* Use as much space on the graph as possible. To do this follow these steps:
1. Find the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ between the high and low data point for an axis

Example: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_*\* If you want a y-intercept = 0, then the low data point is always 0*1. \_\_\_\_\_\_\_\_\_\_\_\_\_\_ the difference by the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ along that axis. This number will represent the scale for each box.

Example: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_*\* You can use this number, or bump it up for simpler increments such as 2.5 or 3.0*Best Fit Line – a \_\_\_\_\_\_\_\_\_\_\_ line drawn through the \_\_\_\_\_\_\_\_\_\_ of a group of points* Never \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* Always \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* Purpose is to determine the trend or \_\_\_\_\_\_\_\_\_\_\_\_\_ between the variables
* Use the following steps:
1. After plotting the points, \_\_\_\_\_\_\_\_\_\_\_ the trend and where the line should go
2. Draw the line with an \_\_\_\_\_\_\_\_\_\_\_\_\_ of points on either side of the line with…
3. the distance of the points above the line should be \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ to the points below the line

*Reading your graph*Direct Relationship – as x \_\_\_\_\_\_\_\_\_\_\_\_\_, y \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Equation: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Inverse Relationship – as x \_\_\_\_\_\_\_\_\_\_\_\_, y \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Equation: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |  Example: A ball is dropped from several distances above the floor (in meters) and the height it bounces is then measured (in centimeters). Create a title and write the variables on the appropriate axes. Example: Graph and find the slope of (4,3) and (1,2)

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Your data may give you a value other than “0”. Why?Example: Use the data below to create a graph. Make sure to include all graph components and use the steps for setting up a scale.

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| **Temperature (°F)** | **Ice Cream Sold (millions of cones)** |
| 70 | 5.0 |
| 80 | 5.5 |
| 90 | 6.0 |

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Example: Draw a best fit line for each set of points. Direct Inverse |

SUMMARY

(3-4 sentences identifying the main points of the notes)