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In this activity, you are going to explore some of the functions of the new handheld TI-Nspire ${ }^{\mathrm{TM}}$ handheld. Open up the Intro.tns file by pressing the $\mathbf{C}$ key. Select 6:MY DOCUMENTS, scroll to the file, and press ' Figure 1 shows what the Intro.tns file looks like when it is open on your TI-Nspire ${ }^{\mathrm{TM}}$ handheld.


## Initial Problem: Thinking it through

1. After reading the opening screen press / and the $\mathbb{\mathbb { W }}$ on the NavPad to move to page 1.2.

Q1: What does column A represent? $\qquad$
2. Using the NavPad, navigate to the blank cell next to the A and type in the name of the variable.
3. Do the same for column B.
4. Highlight cell A1 and change the contents to read 0 .

Q2: What would you change cell A2 to? Explain why. $\qquad$
5. Make the change to the contents of cell A2.

Q3: What would be a question we could answer based on this data?

## Problem \#1.3: Graphical Representation

1. Press / and the $\boldsymbol{\Phi}$ on the NavPad to move to the next page of problem 1 (tab header 1.3).

Q4: What would the x-axis represent? The y-axis? Explain. $\qquad$
2. Press $\mathrm{b}, 3$ : GRAPH TYPE, and 3: SCATTER PLOT.
3. Press • to open the x field and choose your x variable using the NavPad and $\cdot$. Do the same for the y variable.
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Q5: Mathematically and in context, describe the relationship you see.
4. To get a better view press $\mathrm{b}, 4$ : WINDOW, and 9: ZOOM-STAT.
5. On paper you would connect the points with a line, calculate the slope, calculate the y-intercept, determine the equation of the line, and then use this line to answer the question posed. On the handheld ...

Press $\mathbf{e}$ to move to the graphical display, you should see your arrow tool
Press b, 6: POINTS \& LINES, 4: LINE
Move to the first point and press •
Move to the other point and press •
d to close the line tool
Press b, 7: MEASUREMENT, 3: SLOPE
Move to the line and press -
d to close the slope tool
Press $\mathrm{b}, 1$ : TOOLS, and 6: COORDINATES AND EQUATIONS
Press $\mathbf{d}$ to close the equation tool
6. Move the arrow to the equation until you see the open hand. Press / and the $\mathbf{X}$ to grab the equation and now move it to a clear space on the screen. Press ' to release the equation. Repeat for the slope.
7. See board for saving instructions.

Q6: Identify the slope, the y intercept, and the equation of the line.
Slope $=$ $\qquad$
y -intercept $=$ $\qquad$
Equation of the line $=$ $\qquad$

Q7: $\quad$ Write the equation of the line in context of the variables used.
Equation of the line $=$ $\qquad$

Name: Date:
Q8: $\quad$ Describe the slope and y-intercept in terms of the variables.

> Slope =
$\qquad$
y-intercept $=$

Q9: Answer the question you posed in Q3. Show all of your work. Describe completely how you solved the problem.
$\qquad$ Date: $\qquad$


