

TI-Nspire Activity: *Tables and Linear Relationships*

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Activity Overview

This is a beginner level activity that I used on the first day of school with students. It is a very simple 3 page activity in which students identify a consistent change in both x and y and then insert a line to match the data. Students will then use either the Spreadsheet page or the graph in order to predict what the next labeled point on the graph would be. The keystrokes are simple and the 2nd goal is to begin to become comfortable with the handheld and to begin learning some of the keystrokes.

Concepts




Linear Relationship

Teacher Preparation

Load the 1.1 Tables and Linear Equations.tns file onto all of the student handhelds. Students should be able to use the student worksheet and progress through the activity at their own rate. There is little advance preparation since this is designed to be a first time hands-on experience for the students

The Classroom.

Hand out the student worksheet.


On 
Home 
My Documents 

*You will need to guide the students on which file the document is located in and how to find it.

1.1

Review the data on the next page.

Does the table of values represent a linear relationship between x and y ?
If it does, what the next ordered pair be that would appear in the table?

Control right click to move to next page.  ▶

Review the data on the next page.
Does the table of values represent a linear relationship between x and y ?

If it does, what would the next ordered pair be that would appear in the table?

* This is a notes page and the only skill students need to learn at this point is how to change to a new page. Students will not actually type an answer on this page.

1.2

Examine column x and column y.

(you may need to use the right arrow \blacktriangleright to see the y column)

What is the change in x as you move down the column?

What is the change in y as you move down the column?

Control, tab to move to the opposite side of the slide.



* Since this is a split screen, you will need to guide students on how to move from one side of the page to the other side. you will also need to guide students on getting to the answer section so they can begin to practice typing with the handheld.

A	x	B	y	C	Question
1	7	11			What is the change in x each time? y? Answer ∇
2	12	8			
3	17	5			
4	22	2			
5	27	-1			
6	32	-4			
AI	7				

Control, right click to move to next page.



1.3

Insert a line to fit the data.



6 points and lines

4 line

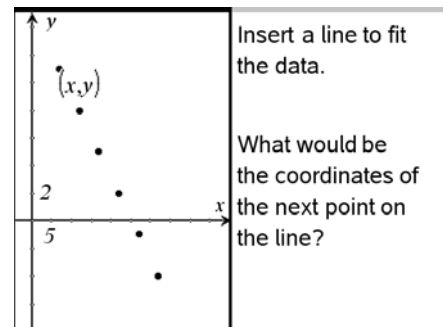
Click on the top point (it should display "point on")

Click on the bottom point (it should display "point on")

A line should appear.

What would be the coordinates of the next point on the line?

Move to the other 1/2 of the page to answer the question.



* Some students may need to move back to the previous page and look at the spreadsheet to determine what the next entry would be. If that is the case, you will need to instruct them on how to move to a previous page.

* You may or may not want to go into saving of work. I found that for first time experiences, having the students save the file into a specific folder for future use did not go well.

The Document

These are the pages which appear in the document.

<p>Review the data on the next page.</p> <p>Does the table of values represent a linear relationship between x and y?</p> <p>If it does, what would the next ordered pair be that would appear in the table?</p>	<table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <thead> <tr> <th style="width: 5%;"></th> <th style="width: 10%;">A</th> <th style="width: 10%;">x</th> <th style="width: 10%;">B</th> <th style="width: 10%;">y</th> <th style="width: 5%;">C</th> </tr> </thead> <tbody> <tr> <td>1</td> <td></td> <td>7</td> <td></td> <td>11</td> <td></td> </tr> <tr> <td>2</td> <td></td> <td>12</td> <td></td> <td>8</td> <td></td> </tr> <tr> <td>3</td> <td></td> <td>17</td> <td></td> <td>5</td> <td></td> </tr> <tr> <td>4</td> <td></td> <td>22</td> <td></td> <td>2</td> <td></td> </tr> <tr> <td>5</td> <td></td> <td>27</td> <td></td> <td>-1</td> <td></td> </tr> <tr> <td>6</td> <td></td> <td>32</td> <td></td> <td>-4</td> <td></td> </tr> <tr> <td style="text-align: left;">AI</td> <td></td> <td>7</td> <td></td> <td></td> <td></td> </tr> </tbody> </table>		A	x	B	y	C	1		7		11		2		12		8		3		17		5		4		22		2		5		27		-1		6		32		-4		AI		7				<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 100%;">Question</th> </tr> </thead> <tbody> <tr> <td style="padding: 5px;">What is the change in x each time? y?</td> </tr> <tr> <td style="text-align: right; padding: 5px;">Answer </td> </tr> <tr> <td style="height: 20px;"></td> </tr> </tbody> </table>	Question	What is the change in x each time? y ?	Answer		<div style="display: flex; align-items: center;"> <div style="margin-left: 10px; padding-top: 10px;"> <p>Insert a line to fit the data.</p> <p>What would be the coordinates of the next point on the line?</p> </div> </div>
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