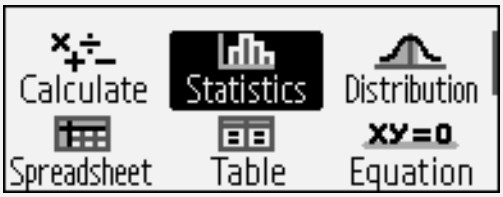
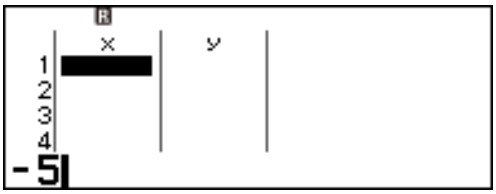
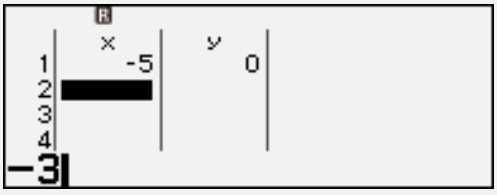
Unit 6: Lesson 3 – What a Point in a Scatter Plot Means

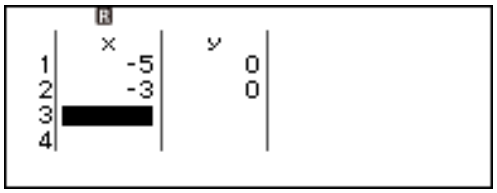
Activity 3.3: Coat Sales

Skills: 1.) Use the Statistics app to create a scatter plot on www.ClassPad.net.
2.) Use Unit Conversions on the Calculate app to convert between ºC and ºF.

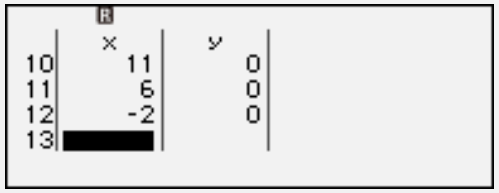
Activity Summary:
Students are asked to interpret information from a scatter plot of average daily temperature for a month to coat sales in dollars. They need to beable to determine the context of a given point and also understand when extrapolated information from a scatter plot does not make sense. The Statistics app on the calculator can be used to create a QR Code to view a scatter plot on www.ClassPad.net. The calculator can also be used to convert a temperature in ºC to ºF.

1. Turn on the calculator with the ⏻ **- On** button. Press ⌂ **– Home** and then use the arrows to highlight the **Statistics app**.	
2. Press either OK or EXE to open the **Statistics app**. To enter the data given for temperature and coat sales, press the **down arrow**, ⓥ, to highlight **2-Variable**.	
3. Press either OK or EXE to select. In the "***x***" column, enter the **average monthly temperature** in Celsius and in the "***y***" column, the corresponding **coat sales in dollars** for that month.	
4. To enter a **negative value** for temperature, press ⓐ then ⊖ before entering the digit for a **negative sign**.	
5. Press either OK or EXE to enter a value and move down to enter the next value. If a **subtraction sign** is entered by mistake, the calculator will **auto-correct** to a **negative sign** once entered. Note the difference between -5 and –3 to the right.	

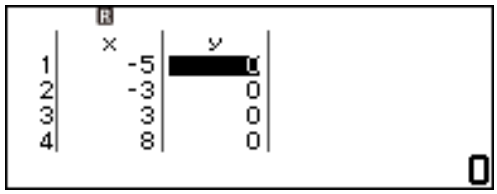
6. Press either [OK] or [EXE] to enter and move down to enter the next value. Notice that both negative values are shown with **negative signs**.



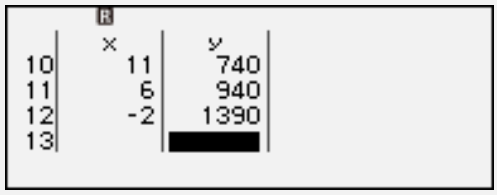
7. Enter the remaining values of average monthly temperature for each month. Press either [OK] or [EXE] after each entry to move down to enter the next value.



8. To quickly move to the top to enter the coat sales in dollars for each month, press the **down arrow**, [▼], to return to the **top value** and then the **left arrow**, [▶], to move to the "***y***" column.

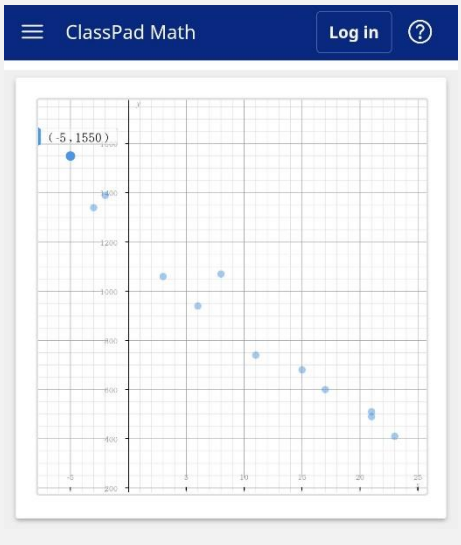


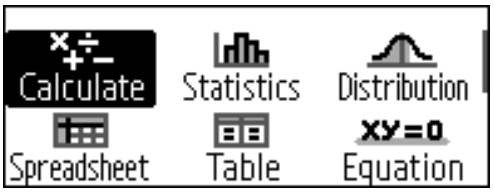
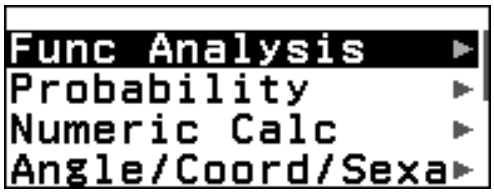
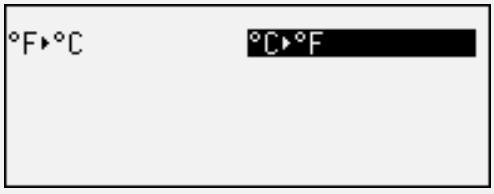
9. Enter the corresponding coat sales in dollars for each month. Press either [OK] or [EXE] after each entry to move down to enter the next value.



10. To view a **scatter plot** of the **data table**, first obtain the **QR Code**, press [SHIFT], [8] and then **scan** with an **internet enabled device**.

11. The **ClassPad.net** page will open on the device, as shown on the right.
12. To view the **coordinates** of any point in the Scatter Plot, click on the point and a **label** will be added as demonstrated with the point representing the month with the lowest average temperature.
13. **The Scatter Plot** can now be used to answer the tasks in the Activity.



14. The last task in this activity asks students to use the trend of the scatter plot to estimate the sales when the average monthly temperature is **60ºC**. To convert to **ºF**, press ⌂ **– Home** and then use the **arrow keys** to highlight the **Calculate app** in the top left corner.	
15. Press either OK or EXE to select and then enter **60**.	
16. To complete a **unit conversion**, press ⌨ **– CATALOG**.	
17. **Unit Conversions** is near the bottom of the menu, so press the **up arrow**, ∧, to quickly go to the bottom. Press the **up arrow** again to highlight **Unit Conversions**.	
18. Press either OK, EXE, or > to view the **Unit Conversions menu**. **Temperature** is at the bottom of the menu, so press the **up arrow**, ∧, to quickly go to **Temperature** at the bottom.	
19. Press either OK, EXE, or > to view the **Unit Conversions menu**. Press the **right arrow**, >, to highlight **ºC ▸ºF**.	
20. Press either OK or EXE to place after the **60**. Press either OK or EXE again to perform the conversion. The trend graph at this temperature is not applicable as **140ºF** is beyond temperatures obtained on earth.