Activity 1

The graph above shows the number of manatees killed in collisions with watercrafts for the years between 1975 and 2004. Unfortunately the data for the years 1984-1988 were lost.

1. Based on the available data, what is your best estimate for how many manatees were killed in 1986? _________ Draw a small circle on the graph showing your prediction. Explain how you made your prediction.

2. What might be another possibility that you thought of and decided against? Why?

3. What is a value that seems like it would be high but possible for the number of manatees killed in 1986 based on the data? ________ What is a value that seems low but possible for the number of manatees killed in 1986 based on the data? ________ Explain how you decided on your answers.

4. Use a piece of uncooked spaghetti to fit a line to the data that would describe the overall trend over time. How did you decide where to put the line? What were you attending to?

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¹Full data sets for activities 1 and 3 available in Core Math Tools through nctm.org

Initiative for Developing Mathematical Thinking
Boise State University, 2015
Activity 2
A marketing group wants to know whether people who subscribe to the music service “Panify” are more likely to actually buy music on a regular basis. They interviewed 186 people and collected the following data:

<table>
<thead>
<tr>
<th></th>
<th>Rarely Buy</th>
<th>Sometimes Buy</th>
<th>Often Buy</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Panify</td>
<td>50</td>
<td>43</td>
<td>17</td>
</tr>
<tr>
<td>Panify</td>
<td>29</td>
<td>28</td>
<td>19</td>
</tr>
</tbody>
</table>

Where “rarely” is purchasing music 0-1 times per month, “sometimes” is purchasing music 2-5 times per months and “often” is buying music more than 5 times per month.

How might the marketing group use these data in answering their original question?
Activity 3

- Weight v. Longevity for Canine Species
- Horsepower v. Speed
- Altitude v. Temperature
- Installed Wind Capacity
- Batting Average
- Braking Distances