

10-25-07

Excel Activity Worksheet

Part One: Record the weights of a wrestler.

It's wrestling season and all the wrestlers need to make weight. This project will require you to follow a wrestler on the team and chart their weight for the next 30 days. Use the chart below to record their weight for each day, round to the nearest pound. Number each day by date and write down what their weight is when they end practice (the wrestling coach keeps a bulletin board in his office with all the office weights charted).

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday

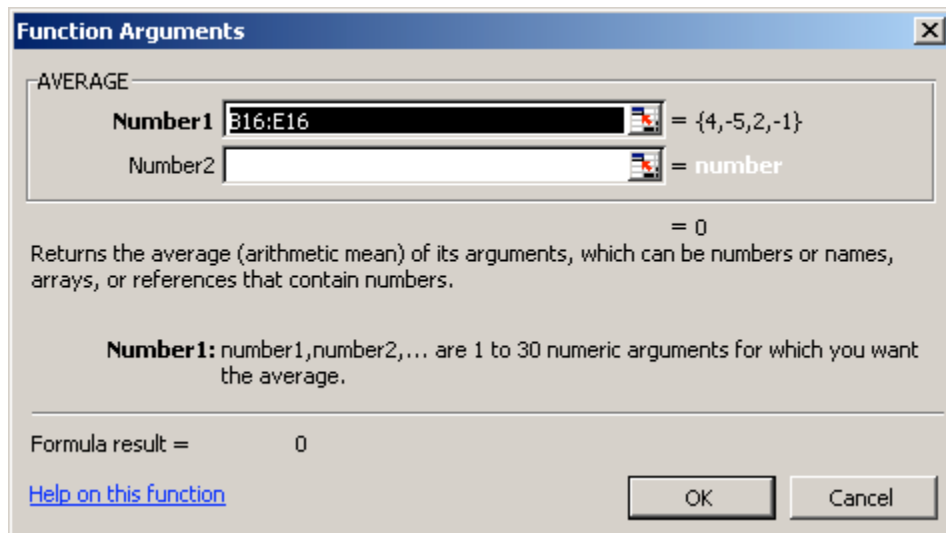
Part Two: Make an excel spreadsheet.

(Follow the directions as written)

- Open Microsoft excel and create a blank spreadsheet.
 - a. Notice that your cursor on the screen is a small white cross.*
- There are rows that are numbered from 1 until as far as your can scroll the page down and columns labeled A-ZZ. (There is a limit to the amount of rows that MS Excel can hold but for this project, we will only use the first twenty rows and columns).
- In the upper-left most part of the spreadsheet, there a blank space. When you click on it, the whole sheet will become highlighted. Click on this space to highlight the whole page
 - a. With the page highlighted, put your cursor in between any two columns. You will notice that the cursor will turn into a bar with two arrows pointing left and right. This will give you the option to widen your columns all at once. Make you columns about twice the size of what they are now.*
 - b. The same can be done with the rows vertically. Make your rows about twice as wide, vertically and the columns wider horizontally.*
- Now that you have room, start to organize the spreadsheet for the date you have collected. Round each weight to the nearest pound.
- First, write the name of the wrestler in the upper-left hand corner of the spreadsheet with his/her goal weight or weight class in parenthesis.

- Now, we will recreate the calendar you used to record the data on the spreadsheet. Type in this date into the cell B2 using this format (mm/dd). Each week will be seven days of data. Since November has 30 days, week four will have nine days.
 - a. Once you put the data into the first cell, there will be a dark black border around the cell. The lower-right part of the border will have a little black box (your cursor will turn into a black cross when you are on top of it. Click and drag this box to fill in the next six cells to the right of the one you started. The computer knows to fill in the next date.*
- Once a week is finished, skip a row and continue this process until all the dates are on the page.
 - a. The dates should take up the columns B-J.*
- Enter in the data from your calendar to the correct dates on the spreadsheet. Make sure all the weights are **bold**. You can do this by highlighting the cells and pressing the ctrl button and “b” on the keyboard.
- In cell K1, label this Week one loss/gain
 - a. We are going to see how much the wrestler gained or lost during the week. Insert a function into cell K2 by pressing “=” and entering the difference between the beginning and end of the week (b2-h2). Hit enter and a number should appear. If #RREF appears in the box come and see me for help*
- Repeat the process in column K for the rest of the weeks.
 - a. Note: since week four has nine days, the difference will be b8-j8.*

- Below the calendar of data will be four rows and six columns for additional calculations.
- Label a row for “weekly weight loss” and four columns following for weeks 1-4.
 - a. *For each of the empty cells underneath each week, type in (=corresponding cell). The data is on the page at the end of each week to the right of the calendar. If you were to change values in the calendar, the will change here automatically.*
- At the end of the row label a column for **Ave weekly gain/loss**.
 - a. *Insert a function by going to the drop-down menu **insert** and selecting **function**. A screen will appear entitled **function arguments***



*Highlight the cells in which you will find the average of and then hit ok. The average should appear. Format the cell to round to the nearest pound by right-clicking on the cell, choosing **format cell**, and going to the **number** tab and choosing **0 decimal places**.*

- Next, create a row labeled **Average weekly weight**
 - a. *Using the same procedure as before to find the average, insert a function for each week that find the average weight. Make sure that each weight is rounded to the nearest pound and make the weights **bold**.*
- Finally, create a column for the **average monthly weight**
 - a. *This will be the **average of the weekly weights**. After the spreadsheet is complete, answer the following questions below.*

1. What weight appears most often in the data set? What is the mode?
2. The Pennsylvania Interscholastic Athletic Association (PIAA) stipulates that healthy weight loss should not exceed 3 pounds per week. Did your wrestlers exceed PIAA standards?
3. What is the relationship between Thanksgiving and the data point around this holiday? What pattern do you notice?