



## Submission Template

You can access the submission template below to submit your project. **Make a copy** (*File->Make a Copy*) and fill it out based on your analysis. Save it as a PDF and submit the PDF in the next section.

### SUBMISSION TEMPLATE

## Data

- **diamonds.csv** - contains carat, cut, clarity, and price information for each diamond in the dataset used to build the regression model.
- **new\_diamonds.csv** - contains carat, cut, and clarity information for the diamonds the company would like to purchase.

## Spreadsheet Calculations

Throughout this Nanodegree you will be presented with problems that require you to make calculations. While you are free to use whatever analytical tool of your choosing and later on, you will learn to use more advanced analysis software like Alteryx and Tableau, it can often be simple to use a spreadsheet for calculations.

If you have little or no experience using spreadsheets to calculate values, don't worry, it's fairly straightforward and a quick online search will reap you many results on learning new and more advanced strategies. If you have plenty of experience making calculations with spreadsheets, feel free to skip the rest of this section.

The most simple way of calculating values in a spreadsheet is by using the **=** sign. (equals sign). Using the **=** sign at the start of the cell will indicate to the software that you are trying to calculate something. From that point, you should be able to use simple operators like addition **+**, subtraction **-**, multiplication **\***, and division **/**.



## Supporting Materials

	A	B	C	D
1				
2				
3				
4			<b>Sum</b>	
5	8	342	=	
6				
7				
8				
9				
10				

Simple addition of two values.

There are also plenty of built-in functions you can use to make it easier for you to calculate values that require many inputs or complex mathematical functions.

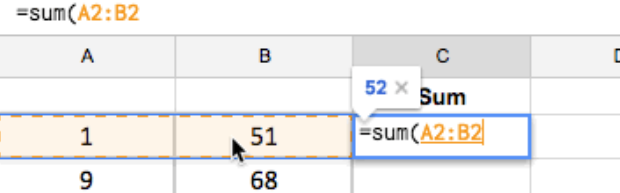
Spreadsheet Calculations Example				
File	Edit	View	Insert	Format
Data	Tools	Add-ons	Help	
	A	B	C	D
1	124			
2	134			
3	157			
4	190	<b>Sum</b>	<b>Average</b>	
5	205	=sum(		
6	230			
7	265			
8	296			
9	336			
10				

Here you see the the SUM and AVERAGE functions being used to calculate multiple values.

If you need to make the same calculation on a number of rows, instead of copy-pasting or rewriting the function you can simply drag the function down and the appropriate values will be calculated for that row.



## Supporting Materials



The screenshot shows a Google Sheet with a table of data. The formula bar at the top displays the formula `=sum(A2:B2)`. A tooltip above the formula bar shows the result **52 x Sum** and the formula `=sum(A2:B2)`. The table data is as follows:

	A	B	C	D
1				
2	1	51		
3	9	68		
4	20	67		
5	1	124		
6	8	97		
7	30	134		
8	20	157		
9	8	190		
10				

If you drag down from the bottom right corner, you can perform calculations on multiple rows.

If you need to edit a function, you can quickly edit it in the function bar near the top of the page (usually indicated by fancy 'Fx')

Spreadsheet Calculations Example

File Edit View Insert Format Data Tools Add-ons Help

\$ % .0 .00 123 Arial 10

*fx* | =A3

	A	B	C	D
1				
2				
3	3	100	=A3	
4				
5				
6				
7				
8				
9				
10				

A change in the function from addition to subtraction.

You can play around with calculations on spreadsheets and do some very powerful things! Later on you will see how you can make graphs and see your data come alive. For further reference, see the links below for your spreadsheet software of choice.

- Excel