**Useful Excel Formulas**

Basic Calculations

|  |  |
| --- | --- |
| Calculation | Formula |
| Total Value | =SUM(Cell 1:Cell n) |
| Mean | =Average(Cell 1:Cell n) |
| Median | =Median(Cell 1:Cell n) |
| Mode | =Mode(Cell 1:Cell n) |
| Maximum Value | =MAX(Cell 1:Cell n) |
| Minimum Value | =MIN(Cell 1:Cell n) |
| Range | Maximum Value – Minimum Value |
| Percentage | =(value/Sum)\*100 |
| A way to remove Margin of Error columns from ACS tables in 4 steps | 1. Copy the whole table (Ctrl + A)
2. Create a New Sheet. Right click on the first cell on the new sheet and use special paste transpose
3. Create a new column on the left of the table and in the first estimate row and write: =MOD(ROW(),2). Expand formula to the rest of the cells
4. Select first row and click the filter tool. Use the drop down filter to deselect the 1 to drop the MOE.
5. Repeat steps 1 and 2 and delete the first row
 |

Single Conditional Statements

|  |  |
| --- | --- |
| Calculation | Formula |
| Total value of a subset | =SUMIF(Range, Criteria, Range of sum) |
| Mean of a subset | =AverageIF(Range, Criteria, Range of average) |
| Median of a subset | =MedianIF(Range, Criteria, Range of Median) |
| Mode of a subset | =ModeIF(Range, Criteria, Range of Mode) |
| Count occurrence (used for frequency tables) | =CountIF(Range,Criteria) |

Multiple Conditional Statements

|  |  |
| --- | --- |
| Calculation | Formula |
| Total value of a subset (with two or more conditions happening) | =SUMIFS(Range of sum, Range\_1, Criteria\_1, Range\_2, Criteria\_2,…) |
| Mean of a subset (with two or more conditions happening) | =AverageIFS(Range of average, Range\_1, Criteria\_1, Range\_2, Criteria\_2,…) |
| Median of a subset (with two or more conditions happening) | =MedianIFS(Range of median, Range\_1, Criteria\_1, Range\_2, Criteria\_2,…) |
| Mode of a subset (with two or more conditions happening) | =ModeIFS(Range of mode, Range\_1, Criteria\_1, Range\_2, Criteria\_2,…) |
| Count occurrence (with two or more conditions happening) (can be used for frequency tables) | =CountIFS(Range\_1, Criteria\_1, Range\_2, Criteria\_2,…) |