1. **SUM**: adds all the numbers that you specify as arguments.

   Sum up all the numbers in cell K7 to K114.

   ![Image of SUM formula](image)

2. **SUMIFS**: Adds the cells in a range that meet multiple criteria.

   Sum up the numbers in cell K6 to K114 which with a “2009” in their column A.

   ![Image of SUMIFS formula](image)

Here we change the criteria to be the number in cell C123.

   ![Image of SUMIFS formula with new criteria](image)

3. **COUNTIFS**: Applies criteria to cells across multiple ranges and counts the number of times all criteria are met.

   Here we have a conditional: less than Y degrees, so we should put this conditional into quotation marks. But as Y is stored in cell C128, if we write “< C128”, C128 will no longer refer to a cell but become a string. Therefore, we should take it out of the “”, and use a & to link between them.

   ![Image of COUNTIFS formula](image)