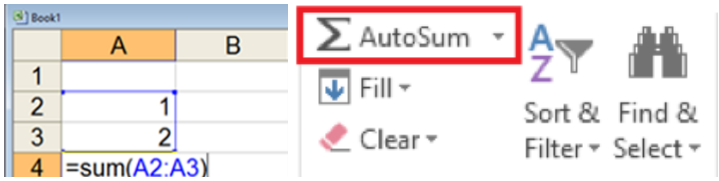
FACTSHEET

8 Formulas for Analyzing Data Using Spreadsheet Software

Below are 8 simple formulas that you can use within Microsoft Excel to help gain key information from your evaluation data.

1. =SUM

- Sum can only be used to add up numbers
- Adds up the numbers in a range
- You can also usually use the AutoSum button, but make sure it adds up the right numbers



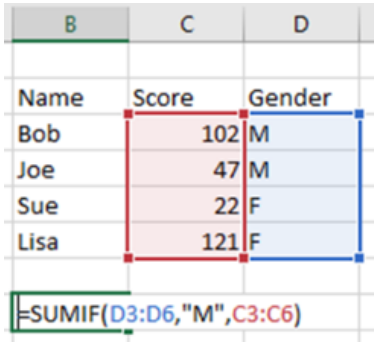
2. =SUMIF()

The sumif function adds up the numbers in a range only if they meet a particular criteria.

EXAMPLE: Cells D3 to D6 are checked to see if they contain the letter 'M'

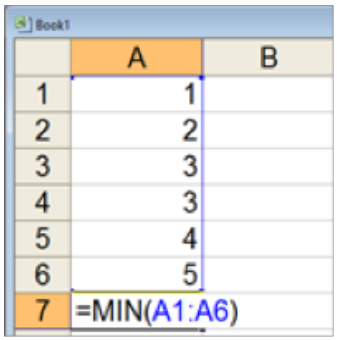
=SUM or SUMIF can be used to add together numbers and numbers based on a criteria

FOR EXAMPLE, we can add up the number of resources we used in programs this week, but we can also count based on the type of resource



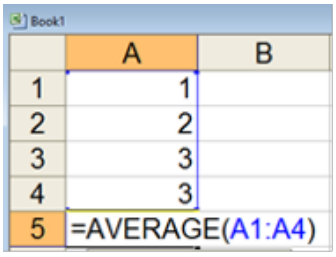
3. =MIN OR =MAX

- =MIN will give us the smallest number from a range of numbers
- =MAX will return the largest number from a range
- **We can use =MIN to find:**
  - The age of youngest participant
  - The lowest score
  - Which day had the lowest attendance
- **We can use =MAX to find:**
  - What is the oldest age
  - The highest score
  - Which day had the highest attendance



4. =AVERAGE

- Will return the average (arithmetic mean) of the numbers in a range
- In this example, the A1:A4 range will return an average of 2.25



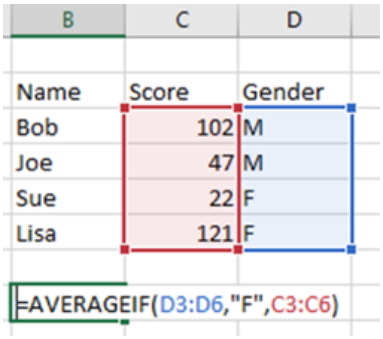
5. =AVERAGEIF (range, criteria, average range)

Will return the average of the numbers in a range if they meet the criteria

EXAMPLE: Cells D3 to D6 are checked to see if they contain the letter 'M'. If they do, the numbers in C3:C6 are added together

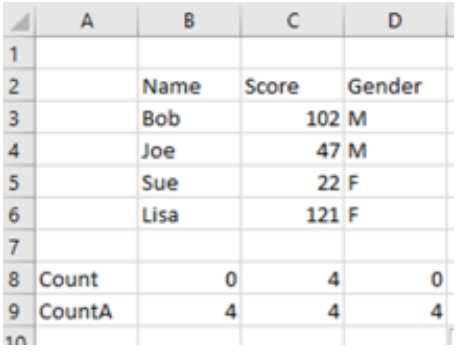
We can use this to determine:

- Average number of participants who attend a program weekly
- Average age of participants
- Average rating/score



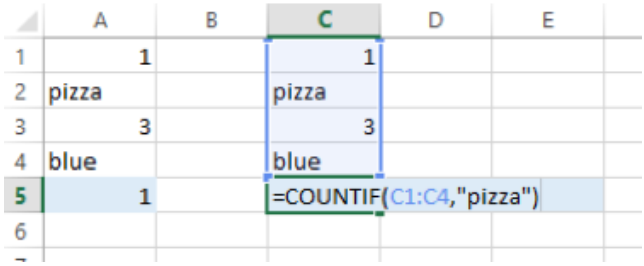
6. =COUNT() AND =COUNTA()

- =Count only counts numbers
- =counta counts how many cells have something in them
- **This could be handy if we wanted to explore:**
  - Attendance
  - Case notes
  - Check marks
  - ...or anything else that would not be possible to mathematically calculate



7. =COUNTIF

- Countif only counts the cell "if" a criteria is met
- In this example, we are only counting cells in the A1:A4 range which match the word pizza
- This formula would give us the result 1, as there is only one mention of pizza
- **Note: =COUNTIFS: counts using multiple criteria**
- **We could use this formula to**
  - Count males and females
  - Program site
  - Allergies
  - Yes/no questions
  - ...or anything else where we need to find a particular word or number



8. =IF(logical test, true, false)

- **The IF statement has three parts**

  1. The logical test
  2. What happens if the test is true
  3. What happens if the test is false

- **We could use this to:**
- Check if a criteria is met, for example, have Excel write Pass or Fail based on a grade or write Yes or No based on attendance
- Have Excel report using easy to understand language that make summaries easier to understand