## Data Analysis Using Spreadsheets - crib sheet part 1

Start with Cities sheet

## **Inserting and deleting rows**

Insert then delete: Palo Alto, USA, 37.44, 122.14, 14.75

# **Inserting columns**

Add fahrenheit column to left of temperature (show control/right-click and drop-down)

7.52 = 45.54 8.1 = 46.58

#### **Formulas**

$$=(f2 * 9/5) + 32$$

Copy-paste to more cells, show automatic cell renumbering, show lower-right double-click

**Your Turn** =(e2 - 32) \* 5/9

### **Deleting columns**

Delete fahrenheit and celsius columns

#### Sorting

- Select temperature column, sort sheet, note annoyance with header row, undo
- Select entire sheet, Data > sort range, by temperature, then by country + latitude descending

# **Filtering rows**

- Select entire sheet, click Filter icon, under temperature note sort option, filter by condition greater than 10, then country contains "ia"
- No way to operate on filtered data except copy-paste to new sheet: =average(e:e), then copy-paste

#### Aggregation

- Average temperature =average(e2:e11), then =average(e2:e214), then =average(e:e)
- Maximum latitude, minimum longitude =max(c:c), =min(d:d)
- Number of longitudes less than 0 =countif(d:d,"<0")

Your Turn (15)