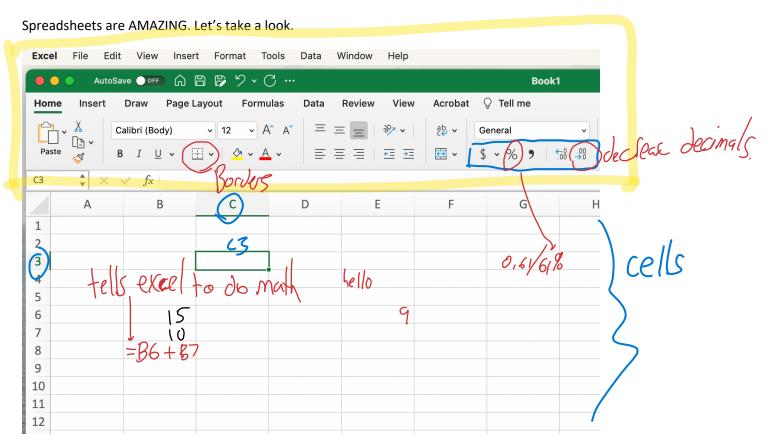
MTH1W – Unit 9: Statistics

| Name: | |
|-------|--|
| | |

Lesson #9.5: Using Statistics with Spreadsheets

Date:

Learning Goal: We are learning to use spreadsheets to calculate statistical summaries.



Useful formulas:

| $Sum_{add} # s = Sum(Block of # s)$ Count how many # s = (ount(Mean = Querage) Median = Median (Mode = -Median) Mode = -Median (Minimum = min (Maximum + = min (Maximum + = max (Maximum | | · · · · · · · · · · · · · · · · · · · | |
|--|----------------------|---------------------------------------|---------------------|
| how mony #3 = (ount (1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | add #'S | = SUM(Block of #5) | |
| $\begin{array}{c c} \text{Mean} & = & \text{Ouerage} & & & \\ \text{Median} & = & \text{Median} & & \text{no need to sort} \\ \text{Mode} & = & \text{Median} & & \text{no node:} \\ \text{Minimum} & = & \text{Min} & & \\ \text{Minimum} & = & \text{Min} & & \\ \text{Maximum} & = & \text{Min} & & \\ \text{Maximum} & = & \text{Max} & & & \\ \text{Maximum} & & \text{Hin} & = & \text{Max} & & \\ \text{Maximum} & = & \text{Max} & & & \\ \text{Maximum} & & & & \\ \text{Maximum} & = & \text{Max} & & & \\ \text{Maximum} & & & & \\ \ \text{Maximum} & & & & \\ \text{Maximum} & & & & \\ \ \text{Maximum} & & & & & \\ \ \text{Maximum} & & & & \\ \ \text{Maximum} & & & & \\ \ Maxi$ | Count how many #5 | = (ount (~) | |
| $\frac{\text{Mode}}{\text{Mode}} = \frac{\text{Mode}}{\text{Mode}} = \frac{\text{Mode}}{\text{Mode}} = \frac{\text{Mode}}{\text{Mode}} = \frac{\text{Mode}}{\text{Mod}} = \frac{\text{Mod}}{\text{Mod}} = $ | Mean | = average (~~) | al cart |
| $\begin{array}{c} \text{Minimum} \\ \text{Govest} \\ \text{Maximum} \\$ | Median | =Median() | no need to solution |
| $\frac{1}{10000000000000000000000000000000000$ | Mode | =mode () | no node: (#NA |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | | =min $($ | |
| Max - Max = Max = [Max] | | = Max() | |
| Standard Deviation = $Stdev_e p($ | Range | = [max] - [min] | |
| | Standard Deviation | = stdev.p(~~) | |

a) Open excel and type in the data into a column. You can type in just the second column.

1. Albert Pujols is one of the best baseball players of all time. Below are the number of homeruns he has hit in every year he has played.

| Year | HR |
|------|----|
| 2001 | 37 |
| 2002 | 34 |
| 2003 | 43 |
| 2004 | 46 |
| 2005 | 41 |
| 2006 | 49 |
| 2007 | 32 |
| 2008 | 37 |
| 2009 | 47 |
| 2010 | 42 |
| 2011 | 37 |
| 2012 | 30 |
| 2013 | 17 |
| 2014 | 28 |
| 2015 | 40 |
| 2016 | 31 |
| 2017 | 23 |
| 2018 | 19 |
| 2019 | 23 |
| 2020 | 6 |
| 2021 | 17 |

2. This table shows the average salary for various job sectors in Canada (as of 2021).

| Job Sectors | Average Salary |
|---|----------------|
| Accommodation and Food Services | \$22,877 |
| Administrative and Support | \$47,369 |
| Arts, Entertainment and Recreation | \$40,241 |
| Construction | \$68,374 |
| Education | \$58,343 |
| Finance and Insurance | \$76.843 |
| Forestry and Logging | \$58,739 |
| Health Care and Social Assistance | \$52,888 |
| Information and Culture Industries | \$71,634 |
| Management of Companies and Enterprises | \$74,560 |
| Manufacturing | \$59,250 |
| Mining, Oil and Gas Extraction | \$113,506 |
| Professional, Scientific, and Technical | \$76,077 |
| Public Administration | \$75,799 |
| Real Estate (Rental/Leasing) | \$58,623 |
| Retail | \$34,503 |
| Transportation and Warehousing | \$61,011 |
| Utilities | \$101,531 |
| Wholesale Trade | \$67,456 |

b) Make a summary table under for each as follows: Fill in this paper.

| | Albert Pujols Homeruns | Canadian Job Salaries |
|--------------------------|------------------------|-----------------------|
| Count | | |
| Mean | | |
| Median | | |
| Mode | | |
| Minimum | | |
| Maximum | | |
| Range | | |
| Standard Deviation | | |
| Low End of Normal Range | | |
| High End of Normal Range | | |
| Years/Jobs Above Normal | | |
| Years/Jobs Below Normal | | |

c) Submit your spreadsheet to Edsby.