**STAT 477/577 – Class Activities**

**Unit 1 – Section 1**

**Numerical and Graphical Summaries of Categorical Variables**

Give three examples of a Categorical Variable. For each variable, specify whether it is Nominal or Ordinal.

Nominal: eye color, hair color, car color, ethnicity

Ordinal: grade (letter), age group

Data Collection – Below is a list of the first majors for students enrolled in this course during a previous semester.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| DS | DS | PSYCH | DS | DS | DS | DS |
| DS | MATH | STAT | CH E | ECON | FIN | STAT |
| DS | DS | STAT | F C P | MKT | ANTHR | E CPE |
| ECON | STAT | CHEM | STAT | STAT | STAT | FIN |
| AESHM | BUSAD | IMSE | IMSE | PSYCH | AGRON | STAT |
| FIN | DS | DS | STAT | DS | DS | MATH |

Make a summary table of first major of students enrolled in this course using the data above.

|  |  |  |  |
| --- | --- | --- | --- |
| Major | Frequency | Percent | Proportion |
| DS | 13 | 30.95 | 0.3095 |
| Psych | 2 | 4.76 | 0.0476 |
| Math | 2 | 4.76 | 0.0476 |
| Stat | 9 | 21.43 | 0.2143 |
| CH E | 1 | 2.38 | 0.0238 |
| Econ | 2 | 4.76 | 0.0476 |
| Fin | 3 | 7.14 | 0.0714 |
| F C P | 1 | 2.38 | 0.0238 |
| MKT | 1 | 2.38 | 0.0238 |
| Anthr | 1 | 2.38 | 0.0238 |
| E CPE | 1 | 2.38 | 0.0238 |
| Chem | 1 | 2.38 | 0.0238 |
| AESHM | 1 | 2.38 | 0.0238 |
| BUSAD | 1 | 2.38 | 0.0238 |
| IMSE | 2 | 4.76 | 0.0476 |
| AGRON | 1 | 2.38 | 0.0238 |