Venn Diagrams Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Probability – Statistics

1. The two-way table below describes the members of the U.S. Senate in 2008. Construct a Venn diagram of these data using D = Democrat and F = female as the events of interest.

|  |  |  |  |
| --- | --- | --- | --- |
|  | Male | Female | Total |
| Democrats | 40 | 11 |  |
| Republicans | 44 | 5 |  |
| Total |  |  |  |

1. The two-way table below describes the 595 students who responded to a school survey about eating breakfast. Construct a Venn diagram of these data using

B = eats breakfast and M = male as the events of interest.

1. Referring to the Venn diagram below, what’s the probability that at most one of the two events occurs? What’s the probability that at least one of the two events occurs?
2. A recent survey suggests that 85% of college students have posted a profile on Facebook, 54 use MySpace regularly, and 42% do both. Suppose we select a college student at random.
3. Construct a Venn diagram to represent this setting.
4. Find P(does not use Facebook or MySpace).
5. Make a two-way table for this setting.
6. An October 2007 census revealed that 40% of Princeton students primarily used Macintosh computers (MACs). The rest primarily used PCs. At the time of the census, 67% of Princeton students were undergraduates. The rest were graduate students. According to the census, 23% of Princeton’s graduate students said that they used PCs as their primary computers. Suppose that we select a Princeton student at random.
7. Construct a Venn diagram to represent this setting.
8. Find P(graduate who uses a MAC)=
9. Make a two-way table for this setting.