AP Stats Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Introduction to Probability

College Degrees (in Thousands) in School Year (2003-2004)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Degree | Associate | Bachelor’s | Master’s | Professional | Doctorate |
| Women | 405 | 804 | 329 | 41 | 23 |
| Men | 260 | 596 | 230 | 42 | 25 |

Suppose one of these degree recipients is selected at random. Find each of the following probabilities to the nearest 0.001 (b-d is bachelor’s through doctorate).

\*\*Recall from your prior knowledge of probability:

P(woman) means “probability of selecting a woman”; and

P(woman|Bachelor’s) means “probability of selecting a woman, given the recipient received their bachelor’s degree)

1. P(woman selected)
2. P(bachelor’s degree recipient is selected)
3. P(woman selected|recipient received a bachelor’s degree)
4. P(b-d recipient selected| recipient is woman)
5. P(woman and b-d recipient selected)
6. P(woman or b-d recipient selected)
7. P(man selected|recipient received a doctorate’s degree)
8. P(woman or a man is selected)
9. P(woman and man is selected)

**Please read pages 225-233**

AP Stats Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Introduction to Probability

College Degrees (in Thousands) in School Year (2003-2004)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Degree | Associate | Bachelor’s | Master’s | Professional | Doctorate |
| Women | 405 | 804 | 329 | 41 | 23 |
| Men | 260 | 596 | 230 | 42 | 25 |

Suppose one of these degree recipients is selected at random. Find each of the following probabilities to the nearest 0.001 (b-d is bachelor’s through doctorate).

\*\*Recall from your prior knowledge of probability:

P(woman) means “probability of selecting a woman”; and

P(woman|Bachelor’s) means “probability of selecting a woman, given the recipient received their bachelor’s degree)

1. P(woman selected)
2. P(bachelor’s degree recipient is selected)
3. P(woman selected|recipient received a bachelor’s degree)
4. P(b-d recipient selected| recipient is woman)
5. P(woman and b-d recipient selected)
6. P(woman or b-d recipient selected)
7. P(man selected|recipient received a doctorate’s degree)
8. P(woman or a man is selected)
9. P(woman and man is selected)

**Please read pages 225-233**