# CS544 Homework 2 Part 1

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Age | Number of People | Rate of people in Surveyed | Number of BMI above 30 | Probability of BMI above 30 |
| 18-34 | 4250 | 0.425 | 1062 | 0.24988 |
| 35-49 | 2850 | 0.285 | 1710 | 0.6 |
| 50-64 | 1640 | 0.164 | 656 | 0.4 |
| >= 65 | 1260 | 0.126 | 189 | 0.15 |

a:

P(selected person in survey have BMI above 30)

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=

=

Beyes Rule:

b:

P(person who is in age 18-34 have BMI above 30)

=

=0.2936(rounded)

c:

P(person who is in age 35-49 have BMI above 30)

=

=0.4728(rounded)

d:

P(person who is in age 50-64 have BMI above 30)

=

=0.1814(rounded)

e:

P(person who is in age >=65 have BMI above 30)

=

=0.0523(rounded)