Chart, histogram

Description automatically generated

1. The probability is 0.68.
2. The probability is 0.95.
3. The probability is 0.815.
4. The probability is 0.61.

2. Consider the following discrete probability function

|  |  |
| --- | --- |
| X | P(X) |
| 1 | 0.20 |
| 2 | 0.33 |
| 3 | 0.06 |
| 4 | 0.27 |
| 5 | 0.14 |

What is the expected mean, variance, standard deviation?

What is the probability of X being higher than 2?

3. If we consider a condition where number of people are waiting for traffic lights, a variable appears to be normally distributed with mean 1.3 minutes and standard deviation 0.25 minutes? What would be the 95% confidence interval?

1. We have a multiple-choice exam with 12 questions each having 3 possible answers. To pass the exam, we need at least 8 out of 12 questions. What are the chances of passing the example?