

Conditional Probability

$$p(A|B) = \frac{p(A \cap B)}{p(B)}$$

Z-scores

$$z = \frac{X - \mu}{\sigma}$$

Empirical Rule

- 68% of normally distributed data lie within one standard deviation from the mean
- 95% of normally distributed data lie within two standard deviations from the mean
- 99.7% of normally distributed data lie within three standard deviations from the mean