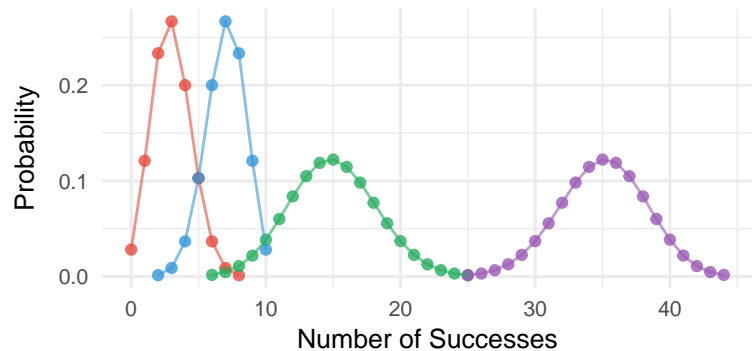


# Common Probability Distributions in Business Analytics

## Binomial Distribution

Number of successes in fixed trials

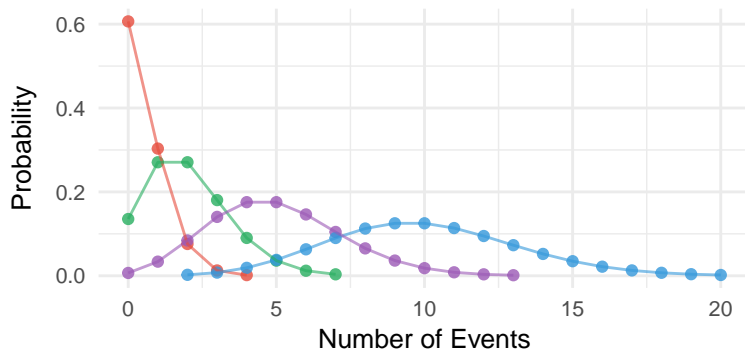


Parameters

- n=10, p=0.3
- n=10, p=0.7
- n=50, p=0.3
- n=50, p=0.7

## Poisson Distribution

Number of events in fixed interval

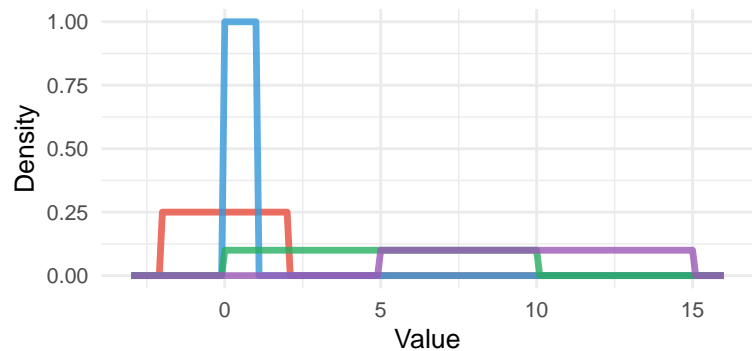


Parameters

- lambda=0.5
- lambda=10
- lambda=2
- lambda=5

## Uniform Distribution

Equal probability across specified range

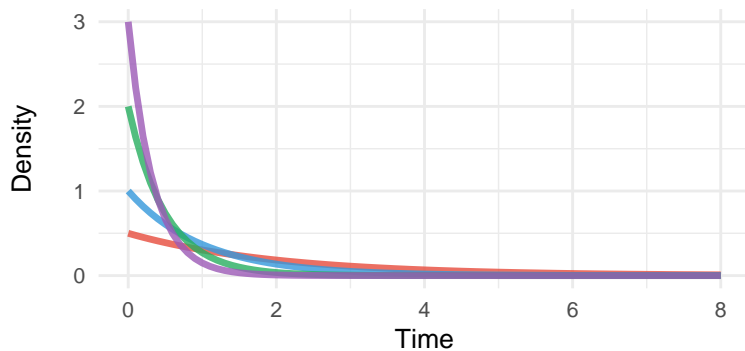


Parameters

- U(-2,2)
- U(0,1)
- U(0,10)
- U(5,15)

## Exponential Distribution

Time between events in Poisson process

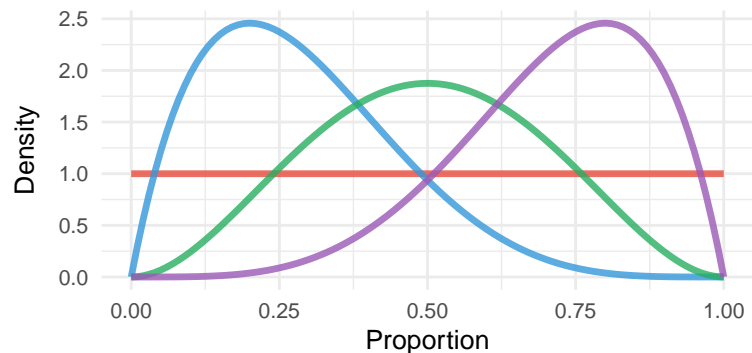


Parameters

- lambda=0.5
- lambda=1
- lambda=2
- lambda=3

## Beta Distribution

Modeling proportions and percentages

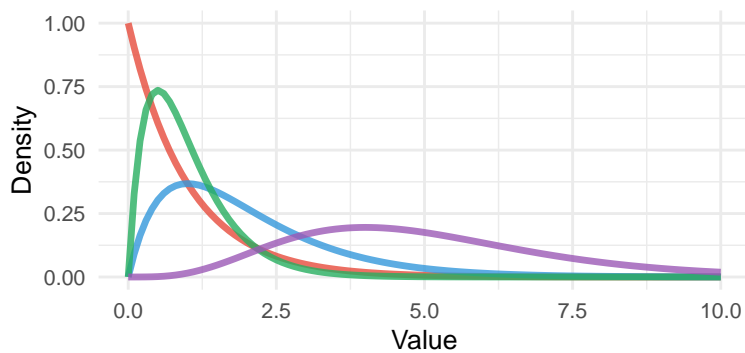


Parameters

- alpha=1, beta=1
- alpha=2, beta=5
- alpha=3, beta=3
- alpha=5, beta=2

## Gamma Distribution

Sum of exponential random variables



Parameters

- alpha=1, beta=1
- alpha=2, beta=1
- alpha=2, beta=2
- alpha=5, beta=1