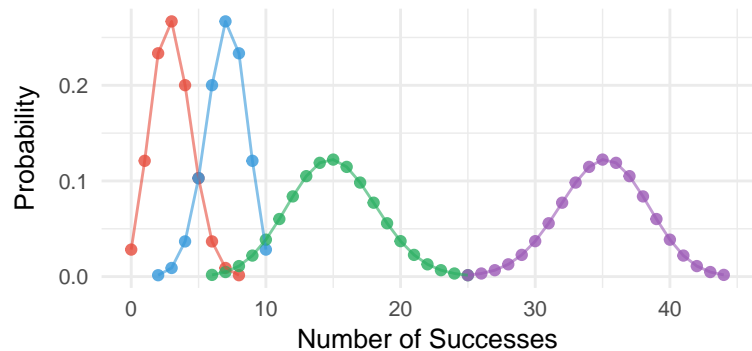


Common Probability Distributions in Business Analytics

Binomial Distribution

Number of successes in fixed trials

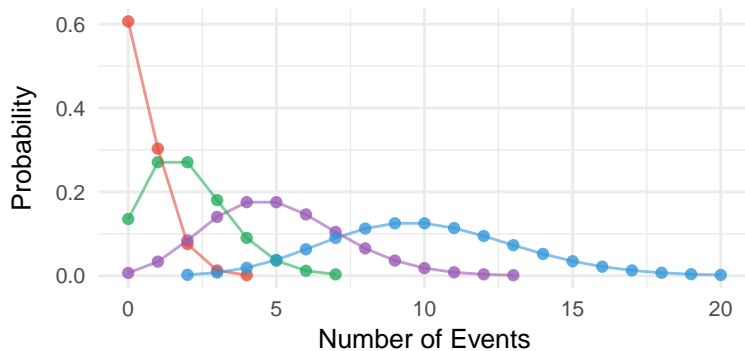


Parameters

- 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

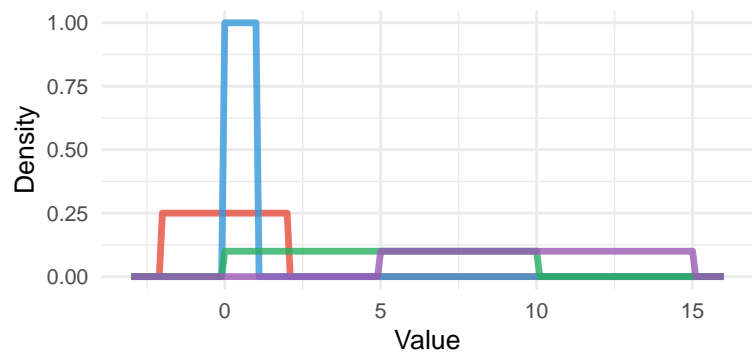


Parameters

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

Uniform Distribution

Equal probability across specified range

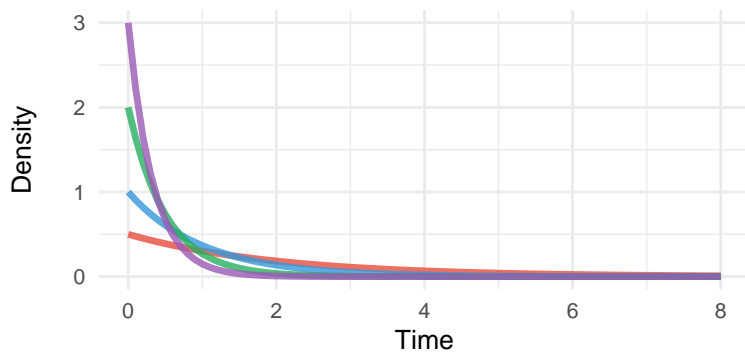


Parameters

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

Exponential Distribution

Time between events in Poisson process

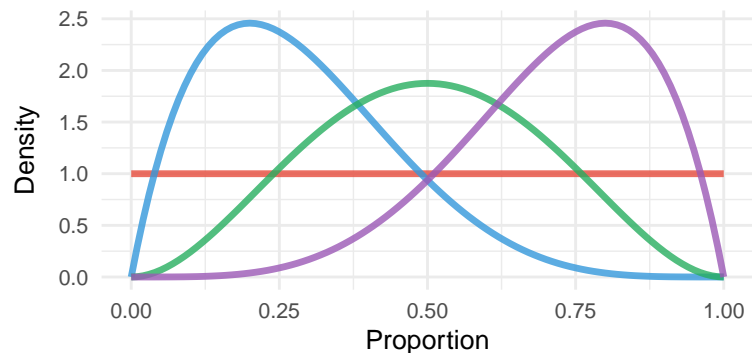


Parameters

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

Beta Distribution

Modeling proportions and percentages

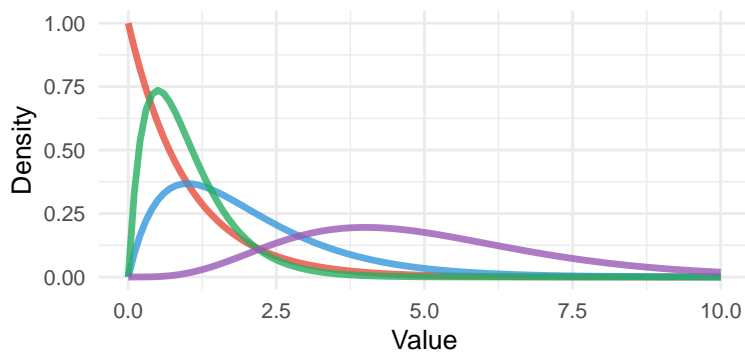


Parameters

- 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