

Probability Distributions

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Binomial Distribution

- Running as a set number of trials, n
- Only two possible outcomes
- Probability of success is p
- Trials are independent

$X \sim B(n, p)$ means X is binomial distributed with n trials and a probability of success p .

$$P(X = r) = \binom{n}{r} p^r (1 - p)^{n-r}$$