Discussion Section #4

AMS 131 24 Apr 19 ①

Binomial distribution (S) (family of)

random variable → Y = # of successes in n success/failure trials, each with (IID) success probability p

~~is distributed as~~
↓

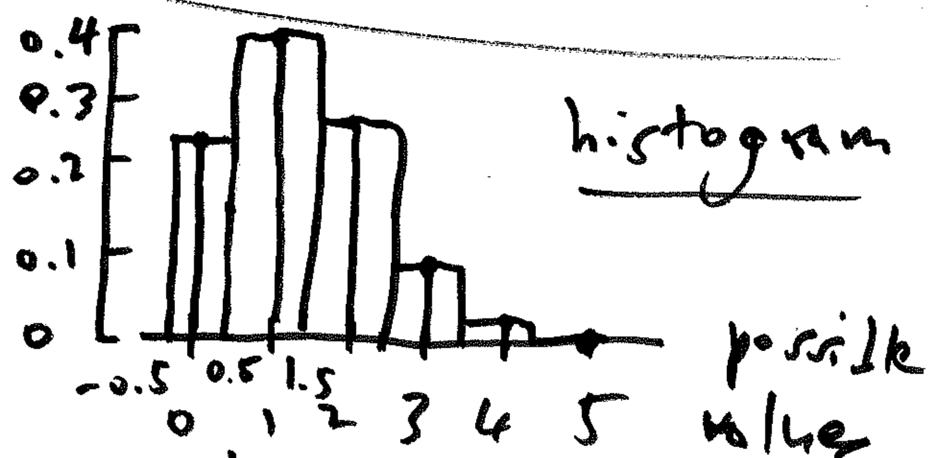
$Y \sim \text{Binomial}(n, p)$ — parameters

$$\leftrightarrow \; P(Y = y) = \begin{cases} \binom{n}{y} p^y (1-p)^{n-y} & \text{for } y = 0, 1, \dots, n \\ 0 & \text{else} \end{cases}$$

$n = 1, 2, \dots$

$0 \le p \le 1$

$P(Y = y)$ →



histogram

← probability mass function (PMF)

R Binomial:
- (d)binom ← PMF values
- pbinom
- qbinom
- (r)binom ← simulates random draws

\begin{quote}

\textit{

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\end{quote}

white | red (2)

69	68	67	66	65	26
					5!