

# Appendix A

## Tables

### A.1 Binomial Probabilities

Tabulated is the value

$$P(Y \leq y) = \sum_{x=0}^y \binom{n}{x} p^x (1-p)^{n-x},$$

where  $Y \sim b(n, p)$ .

- To obtain the value of  $P(Y \leq y)$  when  $p > 0.50$ , use the formula

$$P(Y \leq y) = 1 - P(W \leq n - y - 1),$$

where  $W \sim b(n, 1 - p)$ .

- To obtain the value of the probability mass function,  $p_Y(y)$ , use the formula

$$\begin{aligned} p_Y(y) &= P(Y \leq 0), y = 0, \\ &= P(Y \leq y) - P(Y \leq y - 1), y > 0. \end{aligned}$$





