

FIGURE 2.1

(a) Cumulative distribution function for plant infection data (Example 2.2A) and (b) with 0.5 quantile marked (Example 2.2B).

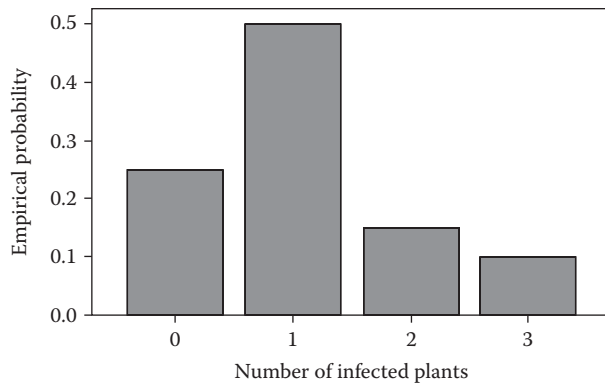


FIGURE 2.2

Bar chart showing the empirical probability distribution of the number of infected plants in the plant infection trial. Three plants were tested in each of 20 pots (Example 2.2D).

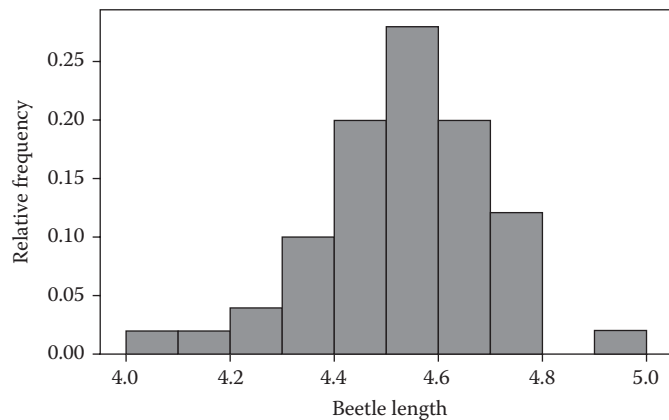


FIGURE 2.3

Histogram of relative frequencies for lengths (mm) of willow beetles from a sample of size 50 (Example 2.3A).

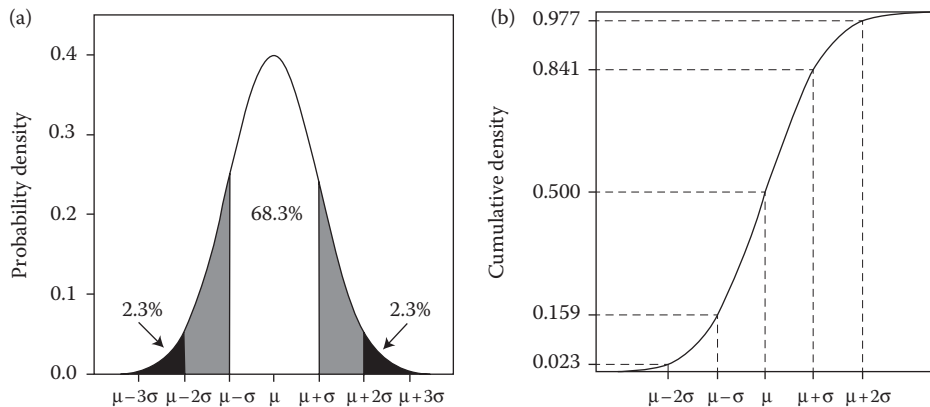


FIGURE 2.4

(a) PDF and (b) CDF of a Normal random variable with mean μ and standard deviation σ .

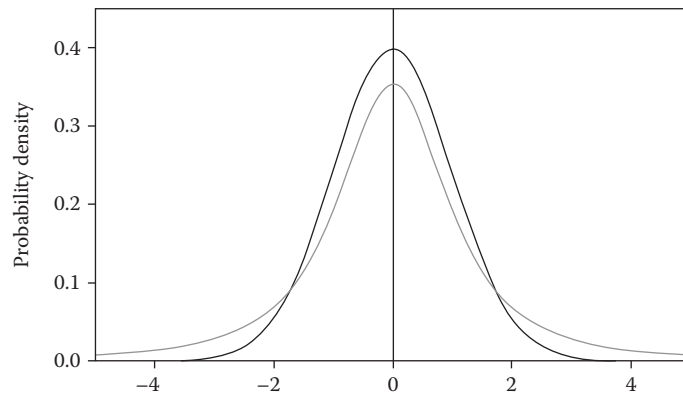


FIGURE 2.5

PDF for standard Normal distribution ($\mu = 0$, $\sigma = 1$, black line) and t-distribution with 2 df (grey line).

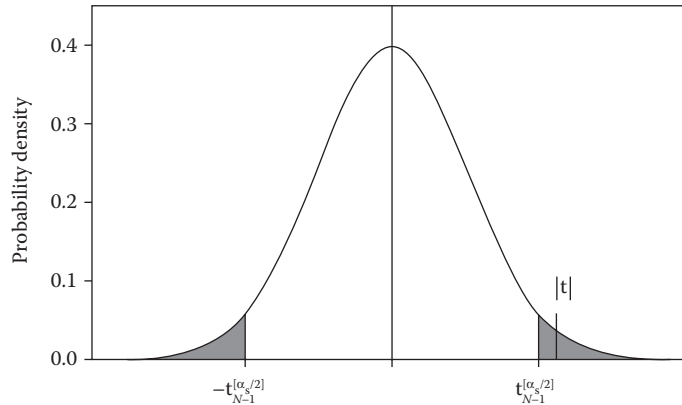


FIGURE 2.6

Critical regions for a two-sided one-sample t-test with probability level α_s . Shaded area covers $100\alpha_s\%$ of distribution containing the most extreme values. $|t|$ is the absolute value of an observed t-statistic greater than the critical value at significance level α_s .

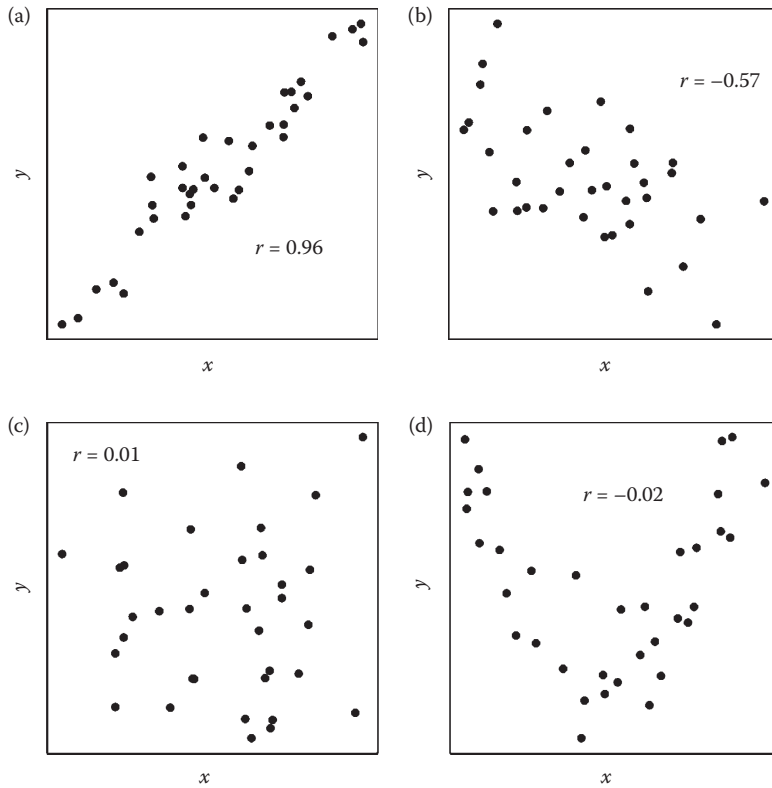


FIGURE 2.7

Scatter plots illustrating correlation patterns between two variables: (a) strong positive correlation; (b) moderate negative correlation; (c) uncorrelated and unrelated variables; (d) uncorrelated but related variables.

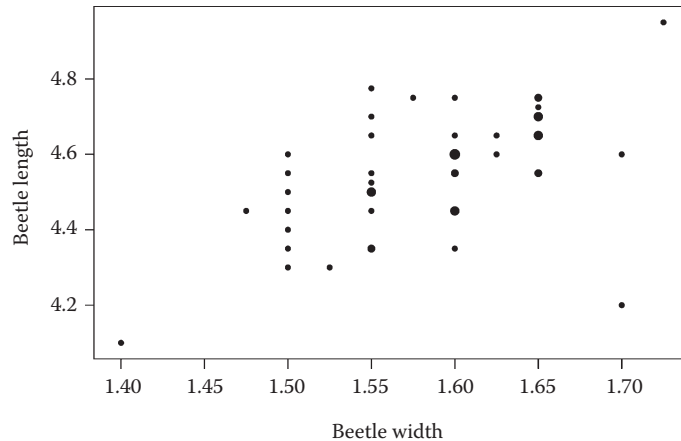


FIGURE 2.8

Length (mm) plotted against width (mm) for 50 willow beetles (Example 2.3B). Area of points is proportional to the number of observations at that position.