

Figure 2.1 A linear function.

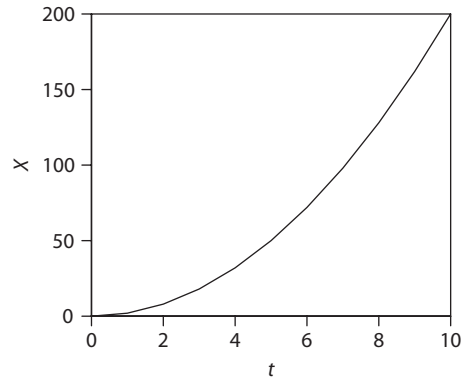


Figure 2.2 A parabolic function.

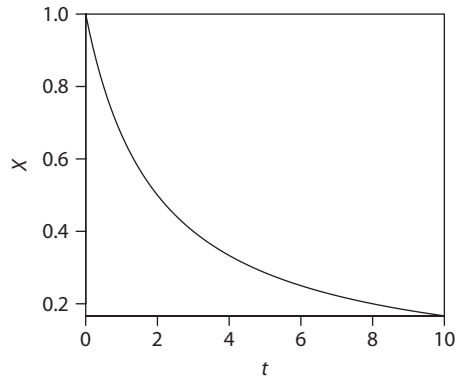


Figure 2.3 A hyperbolic function.

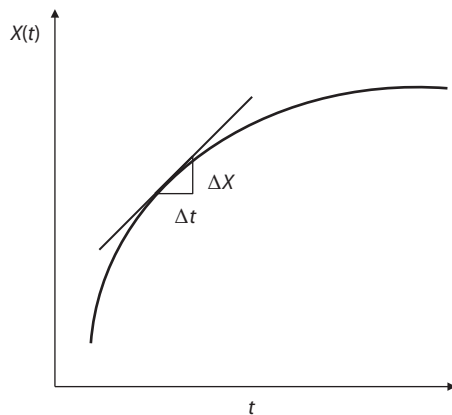


Figure 2.4 Derivative as the slope of the variable X as a function of time, t .

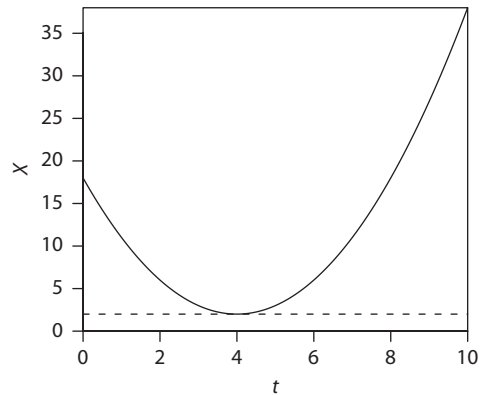


Figure 2.5 The derivative is zero at an optimum.

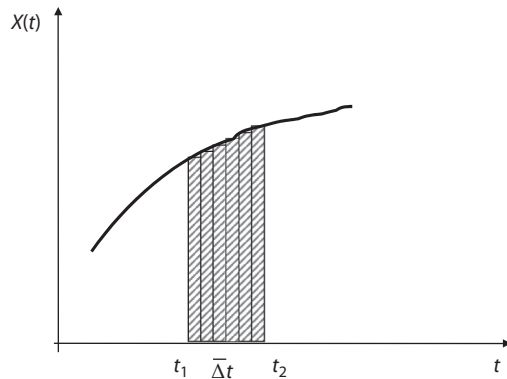


Figure 2.6 Integral as an area under the curve obtained by the summation of the area of many small rectangles of width Δt .

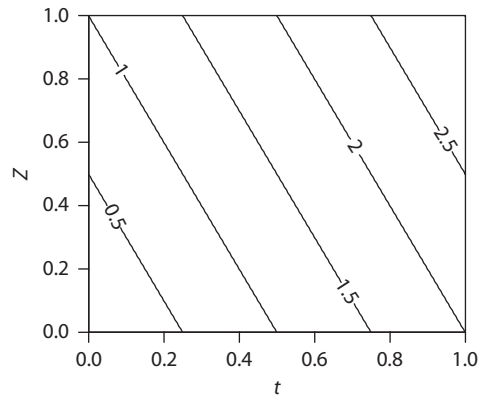


Figure 2.7 A linear function of two variables: an isoline or contour line view.

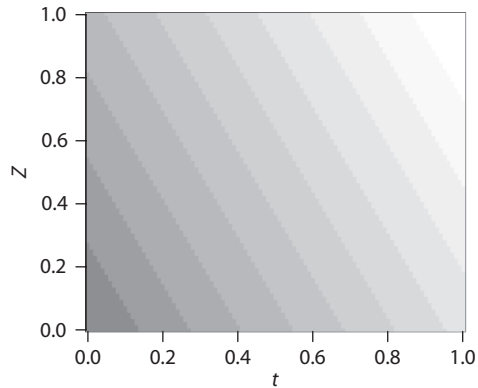


Figure 2.8 Function of two variables: image representation. The lighter the gray, the higher the value of X .

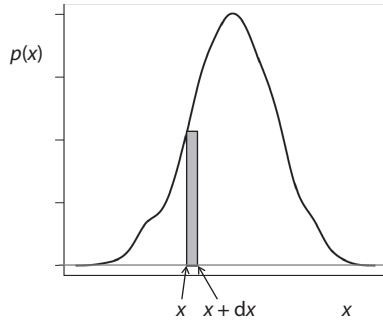


Figure 2.9 Probability density function of a continuous random variable. Probability is area under the curve between two values.

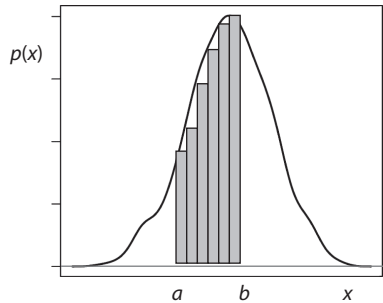


Figure 2.10 Probability of X having a value between a and b .

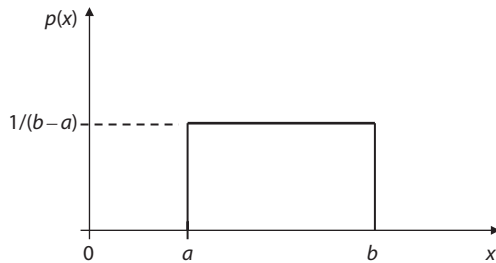


Figure 2.11 Probability density function of a uniform random variable.

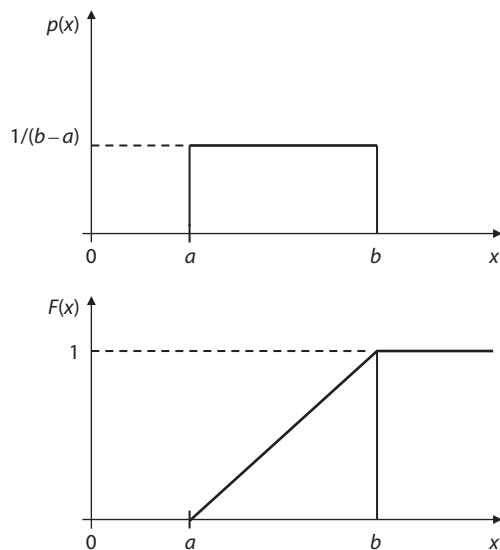


Figure 2.12 Probability density function and cumulative density function for a uniform random variable. Integration of a constant yields a linear increase (ramp function).

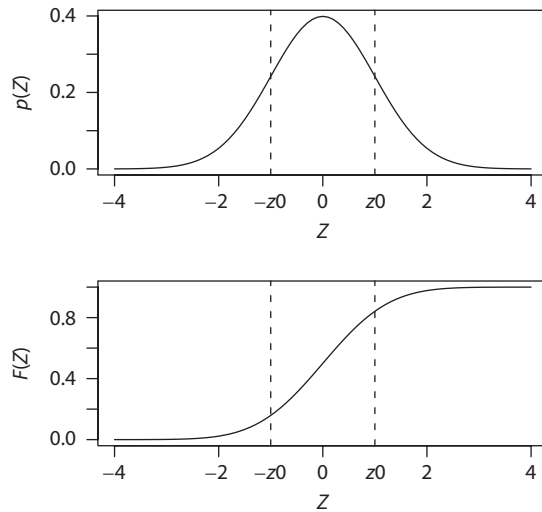


Figure 2.13 Standard normal pdf and cdf.

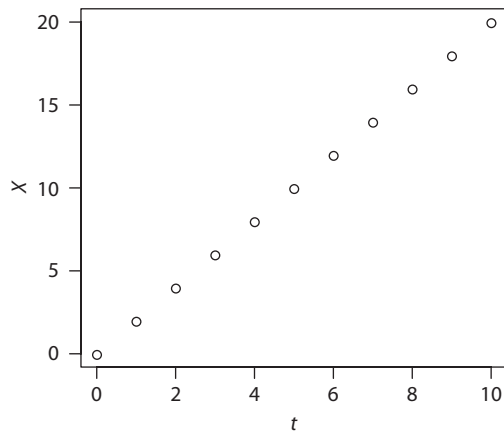


Figure 2.14 A plot of a linear function.

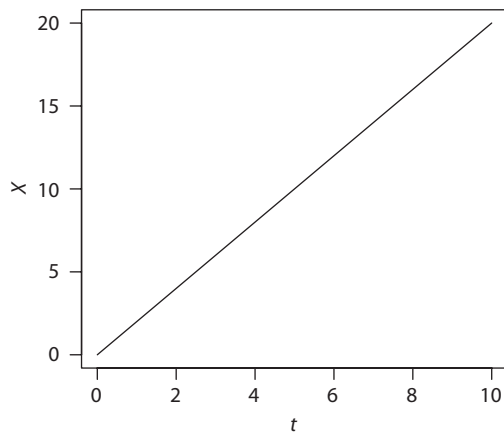


Figure 2.15 A line graph plot of a linear function.

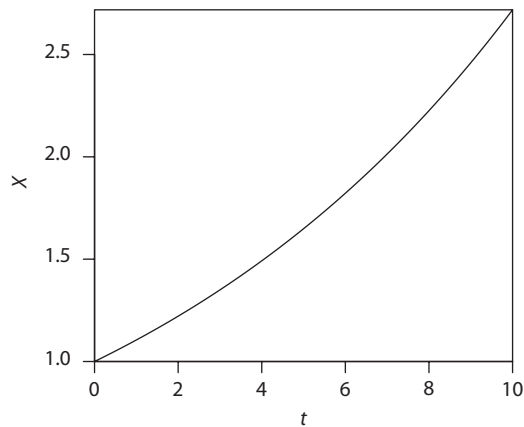


Figure 2.16 An exponential function with t taking values in $[0, 10]$ and $r = 0.1$.

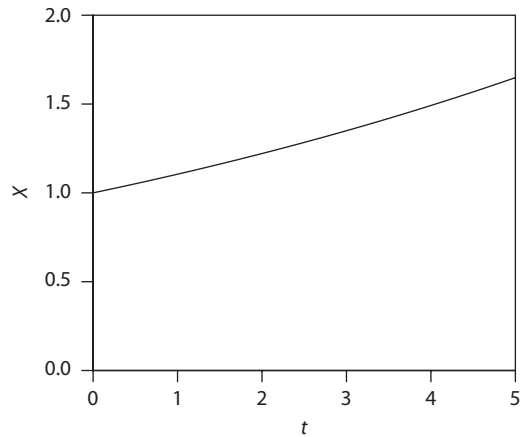


Figure 2.17 Changing the limits of the x and y axes of the graph.

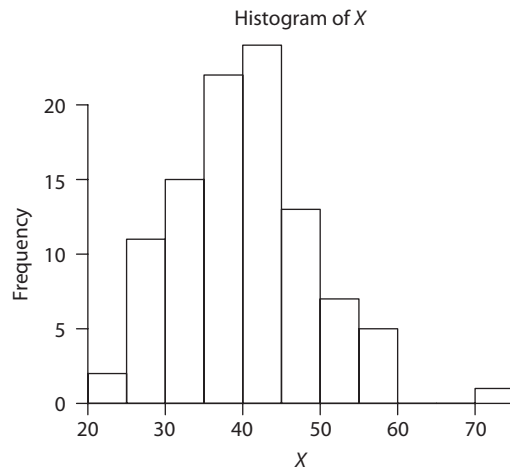


Figure 2.18 Histogram in frequency units.

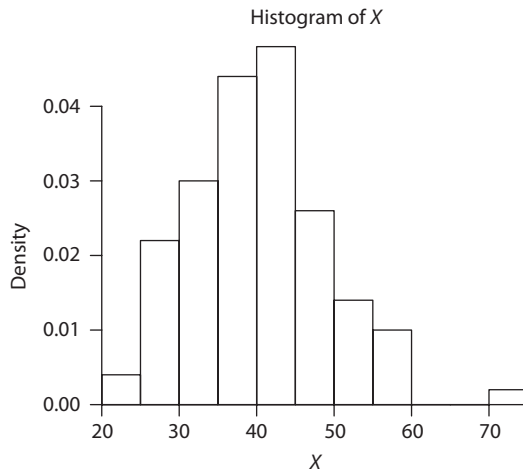


Figure 2.19 Histogram using probability units.