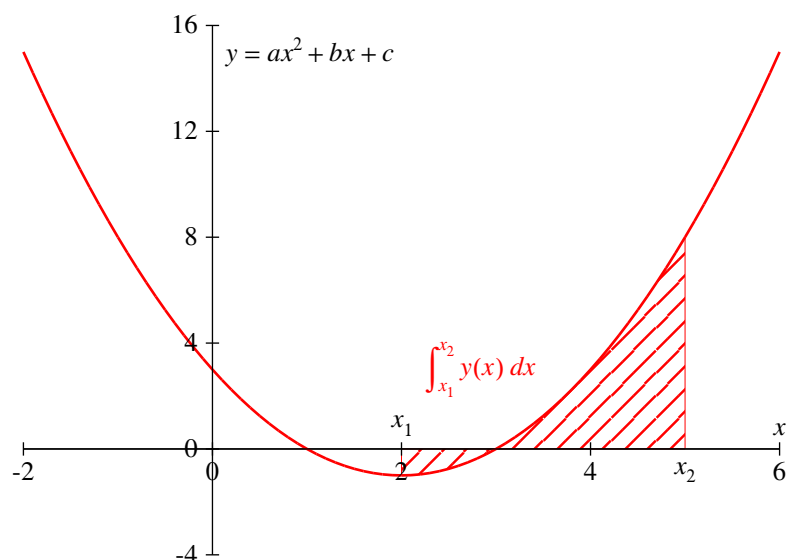

Lout Graph samples (Lout 3.40)

On the use of textures

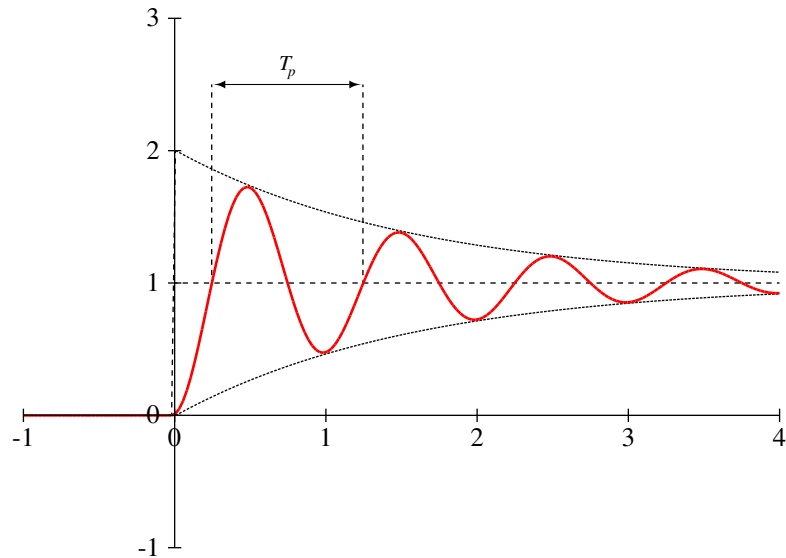
An example of using a texture to emphasize an area



```
@Graph
  style{axes} width{10c} height{7c}
  xorigin{0.0} yorigin{0.0}
  xticksep{2}
  yticksep{4}
  objects{
    @N at{6 0} margin{0.5f} @M{x}
    @E at{0 15} margin{0.5f} @M{y=a x sup 2 + b x +c}
    @N at{2 0} margin{0.5f} @M{x sub 1}
    @S at{5 0} margin{0.5f} @M{x sub 2}
    @E at{3.5 3} red @Color @Math{int from{x sub 1} to{x sub 2} y(x) ` dx}
  }
{
  @Data color{red} pairs{solid} linewidth{0.2p}
  texture{ striped angle { 45d } gap{5p}} paint{yes}{
    xloop from {2} to {5} by { 0.1 } do {
      x {{x - 2} * {x - 2} - 1}
    }
    # close the surface
    5 0 2 0 2 -1
  }
  # Redraw the x axis (nicer)
  @Data pairs{solid} {-2 0 6 0}
  @Data color{red} pairs{solid} linewidth{1p} {
    xloop from {-2} to {6} by { 0.1 } do {
      x {{x - 2} * {x - 2} - 1}
    }
  }
}
}
```

We draw the curve two times. The first is to draw the textured area. Note that we terminate by adding points to close the surface. The second time, we draw the curve on the full x axis.

Using @Diag to add information onto a graph



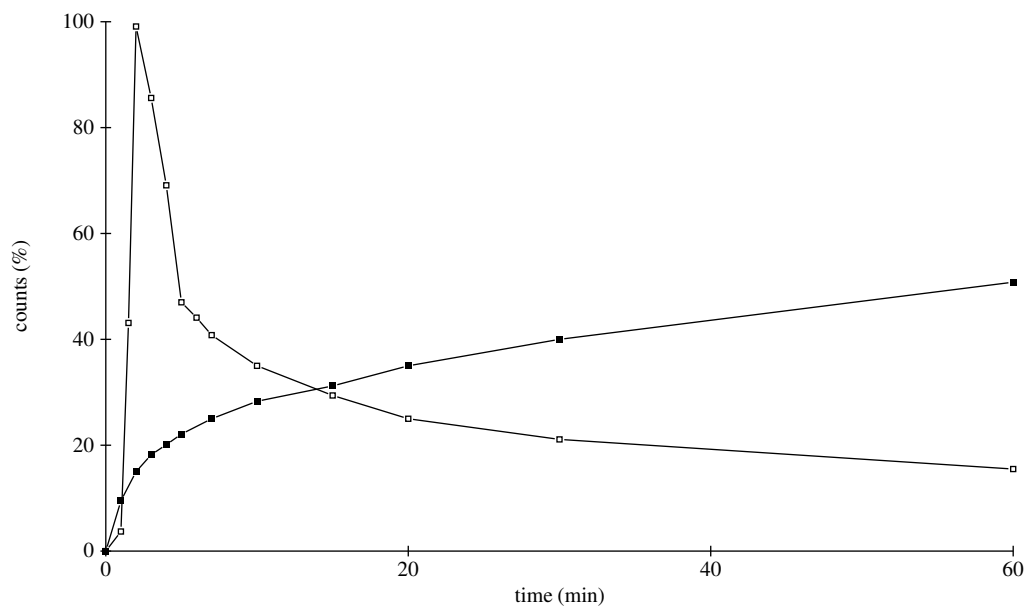
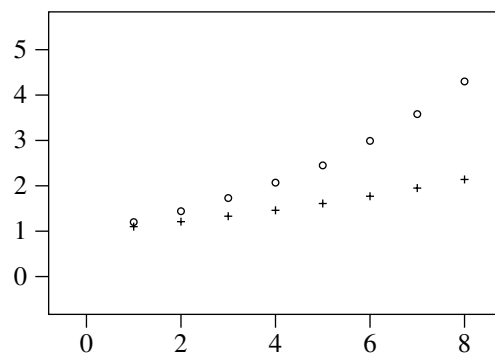
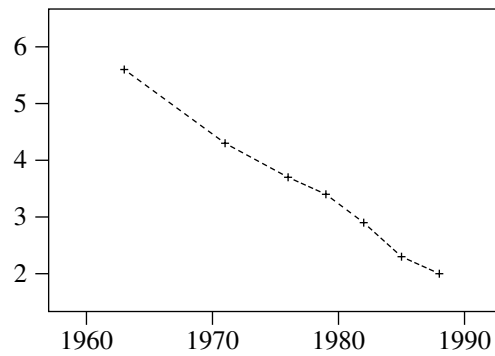
```
@Diag{
  @Graph
    style{axes} width{10c} height{7c}
    xorigin{0.0} yorigin{0.0}
    objects {
      @CTR at{0.245 2.5} {A::@Node margin{0.01f} outlinestyle{noline}}
      @CTR at{1.245 2.5} {B::@Node margin{0.01f} outlinestyle{noline}}
    }
  {
    @Data pairs{dashed} {0.245 1 0.245 2.5}
    @Data pairs{dashed} {1.245 1 1.245 2.5}
    @Data pairs{dashed} {0 1 4 1}
    @Data pairs{dashed} {
      # Include{"data/data3"}
    }
    @Data pairs{dashed} {
      # Include{"data/data4"}
    }
    @Data color{red} pairs{solid} linewidth{1p} {
      # Include{"data/data2"}
    }
  }
  @Link arrow{both} arrowstyle{curvedsolid} backarrowstyle{curvedsolid}
    ylabel{@M{T tsub p}} from{A} to{B}
}
```

Arrows can't be added through the @Graph symbol, so we use the @Diag symbol, define the two points A and B , and use them to draw the arrow between these two points.

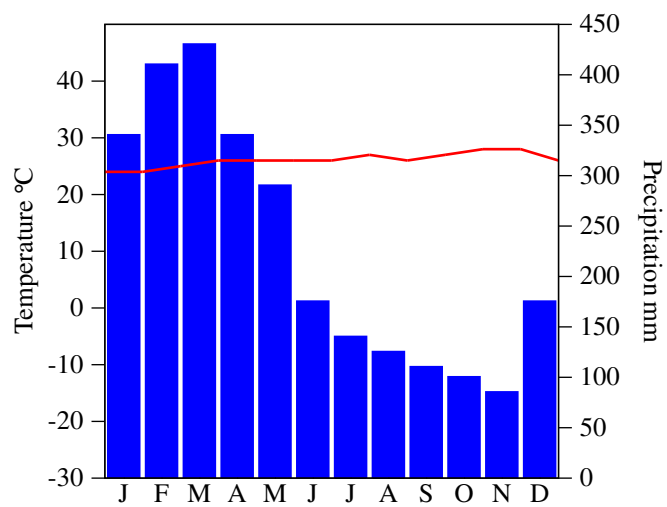
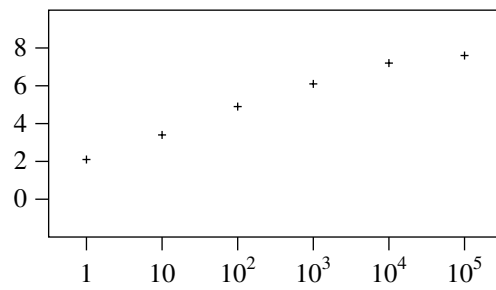
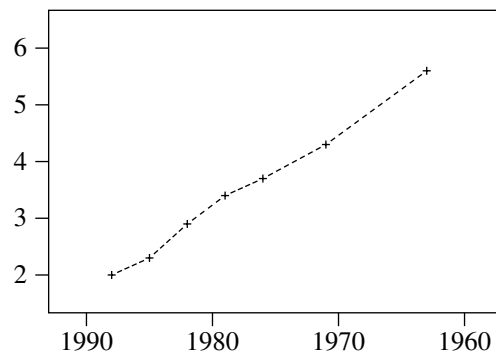
Lout User's Guide examples

For memory, the figures used in the User's Guide rendered by the modified module.

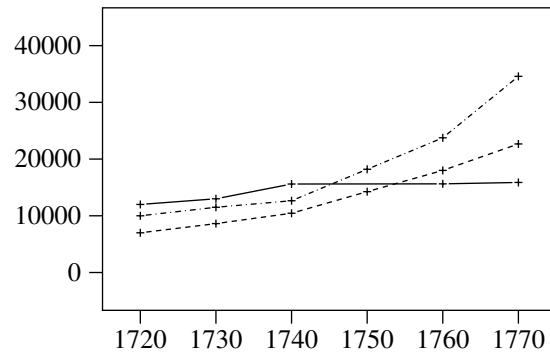
New South Wales road deaths, 1960–1990
(fatalities per 100 million vehicle km)



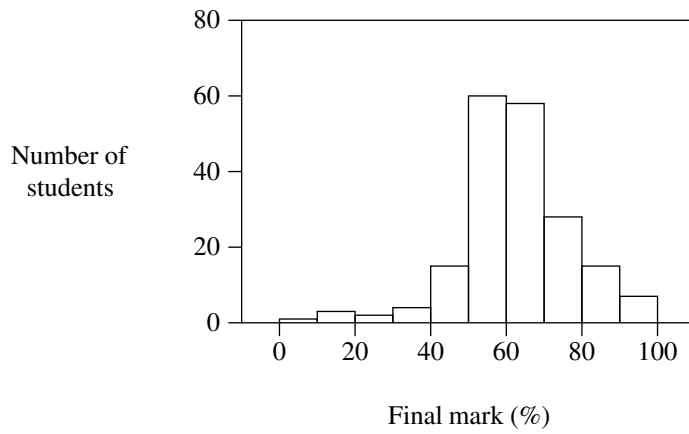
New South Wales road deaths, 1960–1990
(fatalities per 100 million vehicle km)



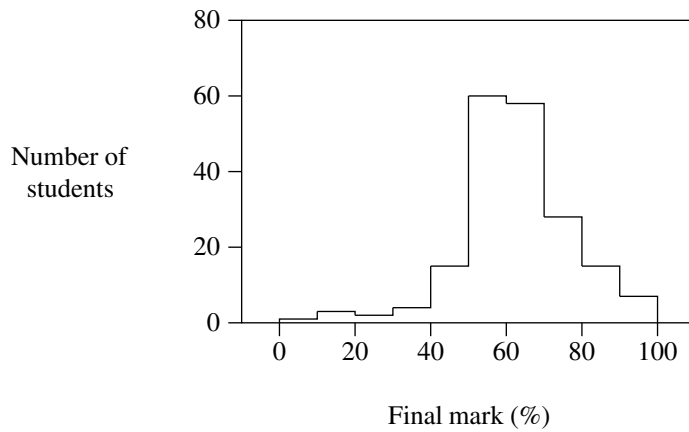
Estimated population of Boston, New York, and Philadelphia



Computer Science 3 Results (1993)



Computer Science 3 Results (1993)



Fertility rates in some developing countries

