

```

% gda02_10
%
% two Normal curves of different variance
% supports Figure 2.10

clear all;

% axes
Dd = 0.1;
N = 101;
dmin=-5;
d = dmin+Dd*[0:N-1]';
dmax=5;

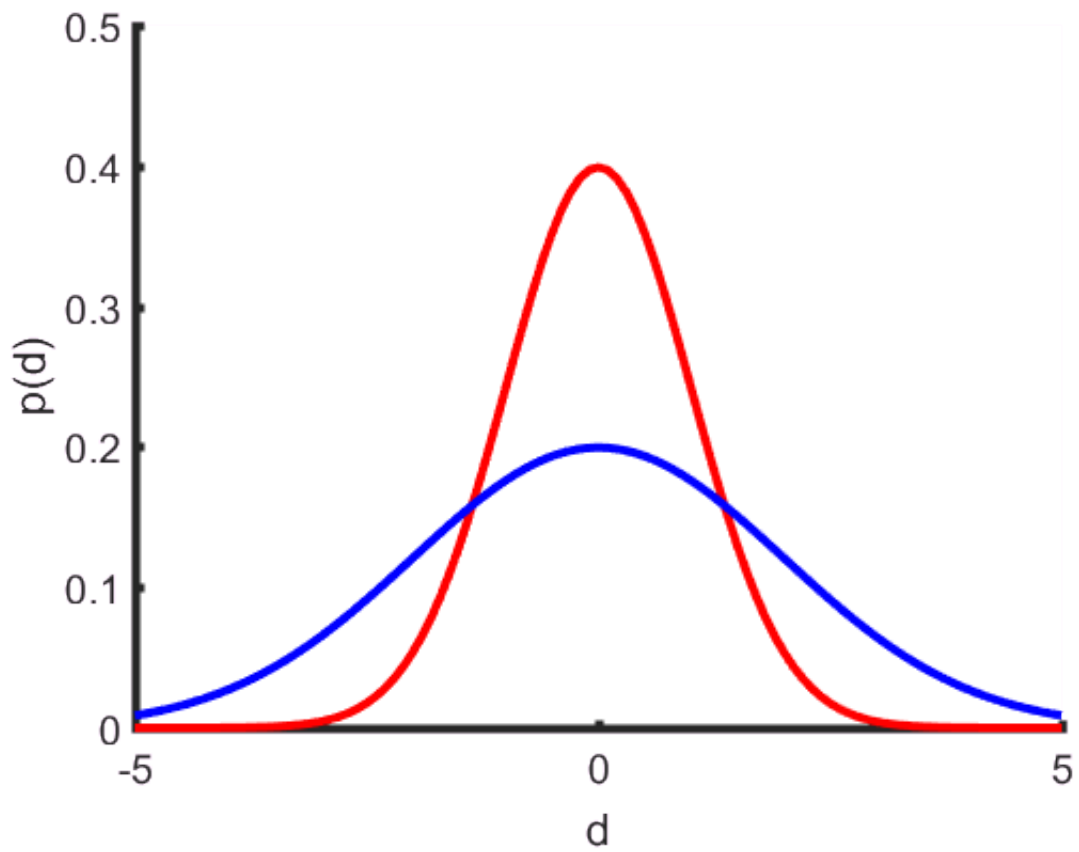
% narrow Normal p.d.f.
sd = 1.0;
dbar = 0.0;
pa = exp(-0.5*(d-dbar).^2/(sd^2))/(sqrt(2*pi)*sd);

% wide Normal p.d.f.
sd = 2.0;
dbar = 0.0;
pb = exp(-0.5*(d-dbar).^2/(sd^2))/(sqrt(2*pi)*sd);

figure(1);
clf;

% plot pdf
set(gca, 'LineWidth', 3);
set(gca, 'FontSize', 14);
hold on;
axis( [dmin, dmax, 0, 0.5] );
plot(d, pa, 'r-', 'LineWidth', 3);
plot(d, pb, 'b-', 'LineWidth', 3);
xlabel('d');
ylabel('p(d)');

```



% Figure 2.12 Gaussian (Normal) distribution with zero mean and $\sigma = 1$ for curve (A) and
% $\sigma = 2$ for curve (B). MatLab script gda02_10.