

```
% Solution to section 6.6, exercise 8(b)
x=[4,6,8,10,12,14,16,18]';
y=[1.58,2.08,2.5,2.8,3.1,3.4,3.8,4.32]';
%The design matrix:
X=[x x.^2 x.^3];
beta=X\y;

Error=y-X*beta;

%Test the model with new data (100 evenly spaced points between 4 and 18):
t=linspace(4,18)';
A=[t t.^2 t.^3];
yout=A*beta;

figure(1)
plot(x,y,'^',t,yout,'k-');
figure(2)
plot(x,Error); %Should make sure there is no pattern in the "error"
```

