Model

```
int numprod = ...;  // or this could just be    int numprod = 4;
int nummachines = ...;

range products 1..numprod;
range machines 1..nummachines;

float+ time[machines, products]=...;
float+ cost[machines]=...;
float+ capacity[machines]=...;
float+ sell[products]=...;

var float+ machusage[machines];
var float+ make[machines,products];

maximize sum (i in products) sell[i]*(sum(j in machines) make[j,i]) - sum(j in machines)
cost[j]*machusage[j]

subject to {
  forall (j in machines)
    sum(i in products) time[j,i]*make[j,i] = machusage[j];
  forall (j in machines)
    machusage[j]<=capacity[j];
};
```

Data File

```
numprod = 4;
nummachines = 2;

capacity = [500 380];
sell = [75 70 55 45];
time = [[2 3 4 2]
     [3 2 1 2]];

cost = [10 5];
```