**Maple codes for transportation problems**

Solving the warehouse example (the first example in Ch 8):

with(linalg):

c:=vector([464, 513, 654, 867, 352, 416, 690, 791, 995, 682, 388, 658])”

x:=vector(12):

z:=dotprod(x,c);

CS:={x[1]+x[2]+x[3]+x[4]=75, x[5]+x[6]+x[7]+x[8]=125, x[9]+x[10]+x[11]+x[12]=100, x[1]+x[5]+x[9]=80, x[2]+x[6]+x[10]=65, x[3]+x[7]+x[11]=70, x[4]+x[8]+x[12]=85}:

with(simplex):

sol:=minimize(z, CS, NONNEGATIVE);

assign(sol); z;

Note: If the problem involves a big M, just replace it with a large number such as 1,000,000.