2
$$x_1 - x_2 + 2x_4 = x_8$$

$$\begin{vmatrix} 1 & -2 & 3 & 4 \\ 1 & 2 & 0 & -1 \\ 0 & -2 & 3 & -2 \end{vmatrix} = -x_5$$

$$0 - 2 - 3 - 2 \rightarrow mn$$

$$\begin{vmatrix} x_1 & x_2 & x_4 & 1 \\ 1 & 2 & 8 & 3 \\ -2 & 2 & 0 \\ 2 & -4 & -3 \end{vmatrix} \Rightarrow \text{Standard, feasible form.}$$

$$2 & x_1 & x_2 & x_4 & 1 \\ 2 & 8 & 3 & -2 \\ 3 & -2 & -2 & -3 \end{vmatrix} \Rightarrow \text{Standard, feasible form.}$$

$$2 & x_1 & x_2 & x_4 & 1 \\ 2 & 8 & 3 & -2 & -2 \\ 2 & -2 & 0 & -2 & -3 \end{vmatrix} \Rightarrow \text{Standard, feasible form.}$$

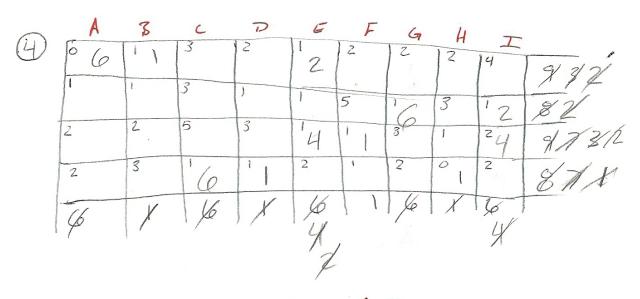
$$2 & x_1 & x_2 & x_4 & 1 \\ 2 & 8 & 3 & -2 & -2 & -2 \\ 2 & -2 & 0 & -2 & -2 & -2 \end{vmatrix} \Rightarrow \text{Standard, feasible form.}$$

$$2 & x_1 & x_2 & x_4 & 1 \\ 2 & 8 & 3 & -2 & -2 & -2 \\ 2 & -2 & 0 & -2 & -2 & -2 \\ 3 & -2 & 0 & -2 & -2 & -2 \\ 4 & -2 & 0 & -2 & -2 & -2 \\ 4 & -2 & 0 & -2 & -2 & -2 \\ 6 & -2 & 0 & -2 & -2 \\ 6 & -2 & 0 & -2 & -2 & -2 \\ 6 & -2 & 0 & -2 & -2 & -2 \\ 6 & -2 & 0 & -2 & -2 & -2 \\ 6 & -2 & 0 & -2 & -2 & -2 \\ 6 & -2 & 0 & -2 & -2 & -2 \\ 6 & -2 & 0 & -2 & -2 & -2 \\ 6 & -2 & 0 & -2 & -2$$

(3) 2 1 13 3 1 2 6 2 5 982 1 2 3 4 1 1 1 3 6 8 2 2 2 6 3 1 2 1 3 5 2 9 3 2 6 1 3 1 2 1 2 30 2 8 7 1 6 1 6 1 3 1 2 1 2 30 2 8 7 1 6

The # of Selected entries is M+n-1=12 Calculation of Potentials is connecessary, as all Columns have Products only Shipped at there lowest cost.

:. The Min Cost of this System is: 6-1+1-1+6-1+1-1+(2+2+2)-1+1-1+6-1+2-1+1-6=35



The Columns have been labled A-I.

Notice that Columns G and I only have a single

Position of Cost 1, Showed in the Same row.

These 1 cost positions shouled be filled first, to

Climnate the 8 demand. Next, Columns A and H

both have Gost 0, which would ideally be filled.

All positions/Colomns have supply in their lowest

Price, except for in Column I. The remaining amounts

of 4, is Put in the next lowest Cost box.

As such, this is a feesible and optimed solution.

Thin Cost = 6.0 + 1.1 + 6.1 + 1.1 + 4.1 + 2.1 + 1.1 + 6.1 + 0.1 + 1.2 + 4.2 = 31

