

a) Auslastung $EC: 200x_1 + 150x_2 + 100x_3 = 2150$
 " $BC: 50x_1 + 30x_2 + 20x_3 = 470$
 $FC: 20x_1 + 10x_2 = 150$

200	150	100		2150
50	30	20		470
20	10	0		150
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$(\cdot 2)$ 20	10	0		150
(-10) 50	30	20		470
(-10) 200	150	100		2150

20	10	0		150
(-10) 0	5	20		35
(-10) 0	50	100		650
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20	10	0		150
0	5	20		35
0	0	-100		-300

$$x_1 = \frac{150 - 10x_2}{20} = \underline{\underline{4}}$$

$$x_2 = \frac{+35 - 20x_3}{5} = \underline{\underline{7}}$$

$$x_3 = \frac{300}{-100} = \underline{\underline{3}}$$

$$\begin{array}{rcl}
 200x_1 + 250x_2 + 20x_3 & = & 1600 \\
 150x_1 + 30x_2 + 10x_3 & = & 350 \\
 100x_1 + 20x_2 + 0 & = & 120
 \end{array}$$

$$\begin{array}{rcl}
 200x_1 + 150x_2 + 100x_3 & = & 1600 \\
 150x_1 + 30x_2 + 10x_3 & = &
 \end{array}$$

$$\begin{array}{rcl}
 200x_1 + 150x_2 + 100x_3 & = & 1600 \\
 50x_1 + 30x_2 + 20x_3 & = & 350 \\
 20x_1 + 10x_2 & = & 120
 \end{array}$$

$$\begin{array}{ccc|c}
 20 & 10 & 0 & \cancel{1600} \quad 120 \\
 -250 & 30 & 20 & 350 \\
 200 & 150 & 100 & 1600
 \end{array}$$

$$\begin{array}{ccc|c}
 20 & 10 & 0 & 120 \\
 0 & 5 & 20 & 50 \\
 0 & 50 & 100 & 400 \\
 \hline
 20 & 10 & 0 & 120 \\
 0 & 5 & 20 & 50 \\
 0 & 0 & -100 & -100
 \end{array}$$

$$x_1 = \frac{120 - 10x_2}{20} = \underline{\underline{3}}$$

$$x_2 = \frac{50 - 20x_3}{5} = \underline{\underline{6}}$$

$$x_3 = \frac{-100}{-100} = \underline{\underline{1}}$$