

03.02.25. (g. / j.)

№ 2, $W = 15y_1 + 10y_2 + 18y_3 + 14y_4$

$$2y_1 + y_2 + 3y_3 + y_4 \leq 9$$

$$y_1 + 3y_2 + 2y_3 + y_4 \leq 7$$

$$y_1 + 2y_2 + y_3 + 4y_4 \leq 6$$

$$y_1 + 4y_2 + 5y_3 + 2y_4 \leq 5$$

$$y_1, y_2, y_3, y_4 \geq 0$$

$$2y_1 + y_2 + 3y_3 + y_4 + y_5 = 9$$

$$y_1 + 3y_2 + 2y_3 + y_4 + y_6 = 7$$

$$y_1 + 2y_2 + y_3 + 4y_4 + y_7 = 6$$

$$y_1 + 4y_2 + 5y_3 + 2y_4 + y_8 = 5$$

B	y_1	y_2	y_3	y_4	y_5	y_6	y_7	y_8	b
y_5	2	1	3	1	1	0	0	0	9
y_6	1	3	2	1	0	1	0	0	7
y_7	1	2	1	4	0	0	1	0	6
y_8	1	4	5	2	0	0	0	1	5
W	-15	-10	-18	-14	0	0	0	0	0

B	y_1	y_2	y_3	y_4	y_5	y_6	y_7	y_8	b
y_5	1,4	-1,4	0	-0,2	1	0	0	-0,6	6
y_6	0,6	1,4	0	0,2	0	1	0	-0,4	5
y_7	0,8	1,2	0	3,6	0	0	1	-0,2	5
y_8	1/5	4/5	1	2/5	0	0	0	1/5	1
W	-11,4	4,4	0	-6,8	0	0	0	3,6	18

B	y_1	y_2	y_3	y_4	y_5	y_6	y_7	y_8	b
y_1	1	-1	0	$-1/2$	$5/2$	0	0	$-3/2$	$30/2$
y_6	0	2	0	$2/2$	$-3/2$	1	0	$-1/2$	$12/2$
y_7	0	2	0	$26/2$	$-4/2$	0	1	$1/2$	$14/2$
y_8	0	1	1	$2/2$	$-1/2$	0	0	$2/2$	$1/2$
W	0	-7	0	$-59/2$	$57/2$	0	0	$-3/2$	$462/2$

$$y_1 = \frac{15}{3}, y_{2,5} = 0, y_4 = \frac{1}{3}$$

$$W = 15 \cdot \frac{28}{3} + 14 \cdot \frac{1}{3} = 65 + \frac{14}{3} = \frac{195+14}{3} = \frac{209}{3}$$

$$B-g_1: y_1 = 3, y_2 = 0, y_3 = 0, y_4 = \frac{1}{3}, W = \frac{209}{3}$$

B	y_1	y_2	y_3	y_4	y_5	y_6	y_7	y_8	b
y_1	1	$-2/3$	$1/3$	0	$2/3$	0	0	$-1/3$	$13/3$
y_6	0	$4/3$	$-2/3$	0	$-1/3$	1	0	$-2/3$	$7/3$
y_7	0	$-20/3$	$-26/3$	0	$2/3$	0	1	$-7/3$	$1/3$
y_4	0	$5/3$	$2/3$	1	$-1/3$	0	0	$2/3$	$1/3$
W	0	$38/3$	$52/3$	0	$16/3$	0	0	$13/3$	$209/3$

$$N=3, W = 20y_1 + 16y_2 + 12y_3 + 18y_4$$

$$3y_1 + y_2 + 2y_3 + y_4 \leq 10$$

$$2y_1 + 4y_2 + 3y_3 + y_4 \leq 6$$

$$y_1 + 3y_2 + 5y_3 + 2y_4 \leq 7$$

$$y_1 + 2y_2 + y_3 + 4y_4 \leq 8$$

$$y_1, y_2, y_3, y_4 \geq 0$$

$$3y_1 + y_2 + 2y_3 + y_4 + y_5 = 10$$

$$2y_1 + 4y_2 + 3y_3 + y_4 + y_6 = 6$$

$$y_1 + 3y_2 + 5y_3 + 2y_4 + y_7 = 7$$

$$y_1 + 2y_2 + y_3 + 4y_4 + y_8 = 8$$

B	y_1	y_2	y_3	y_4	y_5	y_6	y_7	y_8	b
y_5	3	1	2	1	1	0	0	0	10
y_6	2	4	3	1	0	1	0	0	6
y_7	1	3	5	2	0	0	1	0	7
y_8	1	2	1	4	0	0	0	1	8
W	-20	-16	-12	-18	0	0	0	0	0

B	y_1	y_2	y_3	y_4	y_5	y_6	y_7	y_8	b
y_5	0	-5	$-5/2$	$-1/2$	1	$-3/2$	0	0	1
y_1	1	2	$3/2$	$1/2$	0	$1/2$	0	0	3
y_7	0	1	$7/2$	$3/2$	0	$-1/2$	1	0	4
y_8	0	0	$-1/2$	$7/2$	0	$-1/2$	0	1	5
W	0	24	18	-8	0	10	0	0	60

$$y_1 = \frac{16}{7}, y_2 = 0, y_4 = \frac{10}{7};$$

$$W = 20 \cdot \frac{16}{7} + 18 \cdot \frac{10}{7} = \frac{320 + 180}{7} = \frac{500}{7}.$$

$$B-g_6: y_1 = \frac{16}{7}; y_2 = 0; y_3 = 0;$$

$$y_4 = \frac{10}{7}; W = \frac{500}{7}.$$

B	y_1	y_2	y_3	y_4	y_5	y_6	y_7	y_8	b
y_5	0	-5	$-13/7$	0	1	$-11/7$	0	$1/7$	$12/7$
y_1	1	2	$11/7$	0	0	$4/7$	0	$-1/7$	$16/7$
y_7	0	1	$26/7$	0	0	$-2/7$	1	$-3/7$	$13/7$
y_4	0	0	$-1/7$	1	0	$-1/7$	0	$2/7$	$10/7$
W	0	24	$118/7$	0	0	$62/7$	0	$16/7$	$500/7$