1)

$$-b_1b_4b_5 - b_2b_4b_5 - b_3b_4b_5 \longrightarrow b_a(6 - b_1 - b_2 - b_3 - 3b_4 - 3b_5).$$

2)

$$-b_3b_4b_5 - b_1b_3b_4b_5 - b_2b_3b_4b_5 \longrightarrow b_a(8 - b_1 - b_2 - 3b_3 - 3b_4 - 3b_5).$$

These are examples of

3)

$$\min\left(\sum a_ib_i + d, 0\right) \longrightarrow b_a\left(\sum a_ib_i + d\right).$$

4)

$$-b_1b_2b_3b_4-b_1b_2b_3b_5-b_1b_2b_4b_5-b_1b_3b_4b_5-b_2b_3b_4b_5-b_1b_2b_3b_4b_5 \longrightarrow b_a(19-5b_1-5b_2-5b_3-5b_4-5b_5).$$

5)

$$-b_1b_2b_3b_5-b_1b_2b_4b_5-b_1b_3b_4b_5-b_2b_3b_4b_5-b_1b_2b_3b_4b_5 \longrightarrow b_a(16-4b_1-4b_2-4b_3-4b_4-5b_5).$$

6)

$$-b_1b_2b_4b_5 - b_1b_3b_4b_5 - b_2b_3b_4b_5 - b_1b_2b_3b_4b_5 \longrightarrow b_a(13 - 3b_1 - 3b_2 - 3b_3 - 4b_4 - 4b_5).$$

7)

$$-b_1b_3b_4b_5 - b_2b_3b_4b_5 - b_1b_2b_3b_4b_5 \longrightarrow b_a(10 - 2b_1 - 2b_2 - 3b_3 - 3b_4 - 3b_5).$$

8)

$$-b_1b_2b_3b_5 - b_1b_2b_4b_5 - b_1b_3b_4b_5 - b_2b_3b_4b_5 \longrightarrow b_a(12 - 3b_1 - 3b_2 - 3b_3 - 3b_4 - 4b_5).$$

9)

$$-b_1b_2b_4b_5 - b_1b_3b_4b_5 - b_2b_3b_4b_5 \longrightarrow b_a(9 - 2b_1 - 2b_2 - 2b_3 - 3b_4 - 3b_5).$$

,

10)

$$-b_1b_3b_4b_5 - b_2b_3b_4b_5 \longrightarrow b_a(6 - b_1 - b_2 - 2b_3 - 2b_4 - 2b_5).$$

These are examples of

11) If $a_i \leq 0\ \forall i \in \{1,2,3,4,5\}$ and $a_0+a_i+a_j+a_k \leq 0$ for all distinct $i,j,k \in \{1,2,3,4,5\}$, then

$$\begin{aligned}&a_0b_1b_2b_3b_4b_5 + a_1b_2b_3b_4b_5 + a_2b_1b_3b_4b_5 + a_3b_1b_2b_4b_5 + a_4b_1b_2b_3b_5 + a_5b_1b_2b_3b_4\\ &\longrightarrow b_a\left(a_0(b_1+b_2+b_3+b_4+b_5-4) + a_1(b_2+b_3+b_4+b_5-3) + \cdots + a_5(b_1+b_2+b_3+b_4-3)\right).\end{aligned}$$

This can be generalised

12) Let $n \in \mathbb{Z}^+,\ a_0, a_1, \cdots a_n \leq 0$. Then

$$a_0\prod_{i=1}^{n} b_i + \sum_{i=1}^{n}\left(a_i\prod_{j\neq i} b_j\right) \longrightarrow b_a\left(a_0\left(\sum_{i=1}^{n} b_i - (n-1)\right) + \sum_{i=1}^{n} a_i\left(\sum_{j\neq i} b_j - (n-2)\right)\right).$$