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Title: Mathematica Output for the upper bound when $B=K=6$ and $\epsilon=1/20$

EXACT VALUE OF M_1 (Balanced-Balanced distributions)

Point number 1 of type $\{\{a,a,a,a,a,a\},\{d,d,d,d,d,d\}\}$ with $\{a,d\} \geq 1/20$ has maximum equal to $\{0.185185,\{a \rightarrow 0.166667,d \rightarrow 0.166667\}\}$

Point number 2 of type $\{\{1/20,a,a,a,a,a\},\{c,d,d,d,d,d\}\}$ with $\{a,c,d\} \geq 1/20$ has maximum equal to $\{0.178856,\{a \rightarrow 0.19,c \rightarrow 0.261213,d \rightarrow 0.147757\}\}$

Point number 3 of type $\{\{1/20,a,a,a,a,b\},\{c,d,d,d,d,1/20\}\}$ with $\{a,b,c,d\} \geq 1/20$ has maximum equal to $\{0.173483,\{a \rightarrow 0.170662,b \rightarrow 0.267352,c \rightarrow 0.267352,d \rightarrow 0.170662\}\}$

Point number 4 of type $\{\{1/20,1/20,a,a,a,a\},\{c,c,d,d,d,d\}\}$ with $\{a,c,d\} \geq 1/20$ has maximum equal to $\{0.166358,\{a \rightarrow 0.225,c \rightarrow 0.236171,d \rightarrow 0.131915\}\}$

Point number 5 of type $\{\{1/20,1/20,a,a,a,b\},\{c,c,d,d,d,1/20\}\}$ with $\{a,b,c,d\} \geq 1/20$ has maximum equal to $\{0.162824,\{a \rightarrow 0.198938,b \rightarrow 0.303185,c \rightarrow 0.240092,d \rightarrow 0.156605\}\}$

Point number 6 of type $\{\{1/20,1/20,a,a,b,b\},\{c,c,d,d,1/20,1/20\}\}$ with $\{a,b,c,d\} \geq 1/20$ has maximum equal to $\{0.153763,\{a \rightarrow 0.183665,b \rightarrow 0.266335,c \rightarrow 0.266335,d \rightarrow 0.183665\}\}$

Point number 7 of type $\{\{1/20,1/20,1/20,a,a,a\},\{c,c,c,d,d,d\}\}$ with $\{a,c,d\} \geq 1/20$ has maximum equal to $\{0.147426,\{a \rightarrow 0.283333,c \rightarrow 0.216458,d \rightarrow 0.116876\}\}$

Point number 8 of type $\{\{1/20,1/20,1/20,a,a,b\},\{c,c,c,d,d,1/20\}\}$ with $\{a,b,c,d\} \geq 1/20$ has maximum equal to $\{0.147827,\{a \rightarrow 0.21333,b \rightarrow 0.423339,c \rightarrow 0.212814,d \rightarrow 0.155779\}\}$

Point number 9 of type $\{\{1/20,1/20,1/20,a,b,b\},\{c,c,c,d,1/20,1/20\}\}$ with $\{a,b,c,d\} \geq 1/20$ has maximum equal to $\{0.139425,\{a \rightarrow 0.195611,b \rightarrow 0.327194,c \rightarrow 0.237661,d \rightarrow 0.187017\}\}$

Point number 10 of type $\{\{1/20,1/20,1/20,b,b,b\},\{c,c,c,1/20,1/20,1/20\}\}$ with $\{b,c\} \geq 1/20$ has maximum equal to $\{0.122211,\{b \rightarrow 0.283333,c \rightarrow 0.283333\}\}$

Point number 11 of type $\{\{1/20,1/20,1/20,1/20,a,a\},\{c,c,c,c,d,d\}\}$ with $\{a,c,d\} \geq 1/20$ has maximum equal to $\{0.13244,\{a \rightarrow 0.4,c \rightarrow 0.208646,d \rightarrow 0.0827076\}\}$

Point number 12 of type $\{\{1/20,1/20,1/20,1/20,a,b\},\{c,c,c,c,d,1/20\}\}$ with $\{a,b,c,d\} \geq 1/20$ has maximum equal to $\{0.142078,\{a \rightarrow 0.0593153,b \rightarrow 0.740685,c \rightarrow 0.190378,d \rightarrow 0.188488\}\}$

Point number 13 of type $\{\{1/20,1/20,1/20,1/20,b,b\},\{c,c,c,c,1/20,1/20\}\}$ with $\{b,c\} \geq 1/20$ has maximum equal to $\{0.128813,\{b \rightarrow 0.4,c \rightarrow 0.225\}\}$

Point number 14 of type $\{\{1/20, 1/20, 1/20, 1/20, b, b\}, \{c, c, c, 1/20, 1/20, 1/20\}\}$ with $\{b, c\} \geq 1/20$ has maximum equal to $\{0.0896806, \{b \rightarrow 0.4, c \rightarrow 0.283333\}\}$

Point number 15 of type $\{\{1/20, 1/20, 1/20, 1/20, b, b\}, \{c, c, 1/20, 1/20, 1/20, 1/20\}\}$ with $\{b, c\} \geq 1/20$ has maximum equal to $\{0.05715, \{b \rightarrow 0.4, c \rightarrow 0.4\}\}$

Point number 16 of type $\{\{1/20, 1/20, 1/20, 1/20, 1/20, a\}, \{c, c, c, c, c, d\}\}$ with $\{a, c, d\} \geq 1/20$ has maximum equal to $\{0.142069, \{a \rightarrow 0.75, c \rightarrow 0.19, d \rightarrow 0.05\}\}$

Point number 17 of type $\{\{1/20, 1/20, 1/20, 1/20, 1/20, b\}, \{c, c, c, c, c, 1/20\}\}$ with $\{b, c\} \geq 1/20$ has maximum equal to $\{0.142069, \{b \rightarrow 0.75, c \rightarrow 0.19\}\}$

Point number 18 of type $\{\{1/20, 1/20, 1/20, 1/20, 1/20, b\}, \{c, c, c, c, 1/20, 1/20\}\}$ with $\{b, c\} \geq 1/20$ has maximum equal to $\{0.108968, \{b \rightarrow 0.75, c \rightarrow 0.225\}\}$

Point number 19 of type $\{\{1/20, 1/20, 1/20, 1/20, 1/20, b\}, \{c, c, c, 1/20, 1/20, 1/20\}\}$ with $\{b, c\} \geq 1/20$ has maximum equal to $\{0.0698356, \{b \rightarrow 0.75, c \rightarrow 0.283333\}\}$

Point number 20 of type $\{\{1/20, 1/20, 1/20, 1/20, 1/20, b\}, \{c, c, 1/20, 1/20, 1/20, 1/20\}\}$ with $\{b, c\} \geq 1/20$ has maximum equal to $\{0.037305, \{b \rightarrow 0.75, c \rightarrow 0.4\}\}$

Point number 21 of type $\{\{1/20, 1/20, 1/20, 1/20, 1/20, b\}, \{c, 1/20, 1/20, 1/20, 1/20, 1/20\}\}$ with $\{b, c\} \geq 1/20$ has maximum equal to $\{0.01746, \{b \rightarrow 0.75, c \rightarrow 0.75\}\}$

Max attained in point 1 with value 0.18518518518518517`.

EXACT VALUE OF M_2 (Unbalanced-Balanced distributions)

Point number 1 of type $\{\{a, a, a, a, a, b\}, \{c, c, c, c, c, 1/20\}\}$ with conditions $\{a \leq 1/20, b \leq 1, c \geq 1/20\}$ has maximum equal to $\{0.156385, \{a \rightarrow 0., b \rightarrow 1., c \rightarrow 0.19\}\}$

Point number 2 of type $\{\{a, a, a, a, b, b\}, \{c, c, c, c, 1/20, 1/20\}\}$ with conditions $\{a \leq 1/20, b \leq 1, c \geq 1/20\}$ has maximum equal to $\{0.128813, \{a \rightarrow 0.05, b \rightarrow 0.4, c \rightarrow 0.225\}\}$

Point number 3 of type $\{\{a, a, a, b, b, b\}, \{c, c, c, 1/20, 1/20, 1/20\}\}$ with conditions $\{a \leq 1/20, b \leq 1, c \geq 1/20\}$ has maximum equal to $\{0.122211, \{a \rightarrow 0.05, b \rightarrow 0.283333, c \rightarrow 0.283333\}\}$

Point number 4 of type $\{\{a, a, b, b, b, b\}, \{c, c, 1/20, 1/20, 1/20, 1/20\}\}$ with conditions $\{a \leq 1/20, b \leq 1, c \geq 1/20\}$ has maximum equal to $\{0.128813, \{a \rightarrow 0.05, b \rightarrow 0.225, c \rightarrow 0.4\}\}$

Point number 5 of type $\{\{a, b, b, b, b, b\}, \{c, 1/20, 1/20, 1/20, 1/20, 1/20\}\}$ with conditions $\{a \leq 1/20, b \leq 1, c \geq 1/20\}$ has maximum equal to $\{0.16275, \{a \rightarrow 0., b \rightarrow 0.2, c \rightarrow 0.75\}\}$

Point number 6 of type $\{\{1/20, a, a, a, a, a\}, \{c, d, d, d, d, d\}\}$ with conditions $\{a \leq 1, c \geq 1/20, d \geq 1/20\}$ has maximum equal to $\{0.178856, \{a \rightarrow 0.19, c \rightarrow 0.261213, d \rightarrow 0.147757\}\}$

Point number 7 of type $\{\{1/20, a, a, a, b\}, \{c, d, d, d, 1/20\}\}$ with conditions $\{a \leq 1, b \leq 1, c \geq 1/20, d \geq 1/20\}$ has maximum equal to $\{0.173483, \{a \rightarrow 0.170662, b \rightarrow 0.267352, c \rightarrow 0.267352, d \rightarrow 0.170662\}\}$

Point number 8 of type $\{\{1/20, a, a, a, b, b\}, \{c, d, d, d, 1/20, 1/20\}\}$ with conditions $\{a \leq 1, b \leq 1, c \geq 1/20, d \geq 1/20\}$ has maximum equal to $\{0.162824, \{a \rightarrow 0.156605, b \rightarrow 0.240092, c \rightarrow 0.303185, d \rightarrow 0.198938\}\}$

Point number 9 of type $\{\{1/20, a, a, b, b, b\}, \{c, d, d, 1/20, 1/20, 1/20\}\}$ with conditions $\{a \leq 1, b \leq 1, c \geq 1/20, d \geq 1/20\}$ has maximum equal to $\{0.147827, \{a \rightarrow 0.155779, b \rightarrow 0.212814, c \rightarrow 0.423339, d \rightarrow 0.21333\}\}$

Point number 10 of type $\{\{1/20, a, b, b, b, b\}, \{c, d, 1/20, 1/20, 1/20, 1/20\}\}$ with conditions $\{a \leq 1, b \leq 1, c \geq 1/20, d \geq 1/20\}$ has maximum equal to $\{0.142078, \{a \rightarrow 0.188488, b \rightarrow 0.190378, c \rightarrow 0.740685, d \rightarrow 0.0593153\}\}$

Point number 11 of type $\{\{1/20, b, b, b, b, b\}, \{c, 1/20, 1/20, 1/20, 1/20, 1/20\}\}$ with conditions $\{b \leq 1, c \geq 1/20\}$ has maximum equal to $\{0.142069, \{b \rightarrow 0.19, c \rightarrow 0.75\}\}$

Point number 12 of type $\{\{0, a, a, a, a, a\}, \{c, d, d, d, d, d\}\}$ with conditions $\{a \leq 1, c \geq 1/20, d \geq 1/20\}$ has maximum equal to $\{0.173056, \{a \rightarrow 0.2, c \rightarrow 0.326586, d \rightarrow 0.134683\}\}$

Point number 13 of type $\{\{0, a, a, a, a, b\}, \{c, d, d, d, d, 1/20\}\}$ with conditions $\{a \leq 1, b \leq 1, c \geq 1/20, d \geq 1/20\}$ has maximum equal to $\{0.16793, \{a \rightarrow 0.186804, b \rightarrow 0.252783, c \rightarrow 0.343774, d \rightarrow 0.151556\}\}$

Point number 14 of type $\{\{0, a, a, a, b, b\}, \{c, d, d, d, 1/20, 1/20\}\}$ with conditions $\{a \leq 1, b \leq 1, c \geq 1/20, d \geq 1/20\}$ has maximum equal to $\{0.16275, \{a \rightarrow 0.2, b \rightarrow 0.2, c \rightarrow 0.75, d \rightarrow 0.05\}\}$

Point number 15 of type $\{\{0, a, a, b, b, b\}, \{c, d, d, 1/20, 1/20, 1/20\}\}$ with conditions $\{a \leq 1, b \leq 1, c \geq 1/20, d \geq 1/20\}$ has maximum equal to $\{0.16275, \{a \rightarrow 0.2, b \rightarrow 0.2, c \rightarrow 0.75, d \rightarrow 0.05\}\}$

Point number 16 of type $\{\{0, a, b, b, b, b\}, \{c, d, 1/20, 1/20, 1/20, 1/20\}\}$ with conditions $\{a \leq 1, b \leq 1, c \geq 1/20, d \geq 1/20\}$ has maximum equal to $\{0.16275, \{a \rightarrow 0.2, b \rightarrow 0.2, c \rightarrow 0.75, d \rightarrow 0.05\}\}$

Point number 17 of type $\{\{0, b, b, b, b, b\}, \{c, 1/20, 1/20, 1/20, 1/20, 1/20\}\}$ with conditions $\{b \leq 1, c \geq 1/20\}$ has maximum equal to $\{0.16275, \{b \rightarrow 0.2, c \rightarrow 0.75\}\}$

Point number 18 of type $\{\{0, 0, a, a, a, a\}, \{c, c, d, d, d, d\}\}$ with conditions $\{a \leq 1, c \geq 1/20, d \geq 1/20\}$ has maximum equal to $\{0.140625, \{a \rightarrow 0.25, c \rightarrow 0.25, d \rightarrow 0.125\}\}$

Point number 19 of type $\{\{0, 0, a, a, a, b\}, \{c, c, d, d, d, 1/20\}\}$ with conditions $\{a \leq 1, b \leq 1, c \geq 1/20, d \geq 1/20\}$ has maximum equal to $\{0.156385, \{a \rightarrow 0., b \rightarrow 1., c \rightarrow 0.19, d \rightarrow 0.19\}\}$

Point number 20 of type $\{\{0,0,a,a,b,b\},\{c,c,d,d,1/20,1/20\}\}$ with conditions $\{a \leq 1, b \leq 1, c \geq 1/20, d \geq 1/20\}$ has maximum equal to $\{0.129026, \{a \rightarrow 0.210322, b \rightarrow 0.289678, c \rightarrow 0.277571, d \rightarrow 0.172429\}\}$

Point number 21 of type $\{\{0,0,a,b,b,b\},\{c,c,d,1/20,1/20,1/20\}\}$ with conditions $\{a \leq 1, b \leq 1, c \geq 1/20, d \geq 1/20\}$ has maximum equal to $\{0.115782, \{a \rightarrow 0.222517, b \rightarrow 0.259161, c \rightarrow 0.336286, d \rightarrow 0.177427\}\}$

Point number 22 of type $\{\{0,0,b,b,b,b\},\{c,c,1/20,1/20,1/20,1/20\}\}$ with conditions $\{b \leq 1, c \geq 1/20\}$ has maximum equal to $\{0.1062, \{b \rightarrow 0.25, c \rightarrow 0.4\}\}$

Point number 23 of type $\{\{0,0,b,b,b,b\},\{c,1/20,1/20,1/20,1/20,1/20\}\}$ with conditions $\{b \leq 1, c \geq 1/20\}$ has maximum equal to $\{0.08415, \{b \rightarrow 0.25, c \rightarrow 0.75\}\}$

Point number 24 of type $\{\{0,0,0,0,0,1\},\{c,c,c,c,c,d\}\}$ with conditions $\{c \geq 1/20, d \geq 1/20\}$ has maximum equal to $\{0.156385, \{c \rightarrow 0.19, d \rightarrow 0.05\}\}$

Point number 25 of type $\{\{0,0,0,0,0,1\},\{c,c,c,c,c,1/20\}\}$ with conditions $\{c \geq 1/20\}$ has maximum equal to $\{0.156385, \{c \rightarrow 0.19\}\}$

Point number 26 of type $\{\{0,0,0,0,0,1\},\{c,c,c,c,1/20,1/20\}\}$ with conditions $\{c \geq 1/20\}$ has maximum equal to $\{0.116184, \{c \rightarrow 0.225\}\}$

Point number 27 of type $\{\{0,0,0,0,0,1\},\{c,c,c,1/20,1/20,1/20\}\}$ with conditions $\{c \geq 1/20\}$ has maximum equal to $\{0.0690389, \{c \rightarrow 0.283333\}\}$

Point number 28 of type $\{\{0,0,0,0,0,1\},\{c,c,1/20,1/20,1/20,1/20\}\}$ with conditions $\{c \geq 1/20\}$ has maximum equal to $\{0.0312, \{c \rightarrow 0.4\}\}$

Point number 29 of type $\{\{0,0,0,0,0,1\},\{c,1/20,1/20,1/20,1/20,1/20\}\}$ with conditions $\{c \geq 1/20\}$ has maximum equal to $\{0.00915, \{c \rightarrow 0.75\}\}$

Max attained in point 6 with value 0.1788564320295291`.

UPPER BOUND ON M_3 (Unbalanced-Unbalanced distributions on the same coordinate)

Point number 1 of type $\{\{s_1,(1-s_1)/5,(1-s_1)/5,(1-s_1)/5,(1-s_1)/5,(1-s_1)/5\},\{s_2,(1-s_2)/5,(1-s_2)/5,(1-s_2)/5,(1-s_2)/5,(1-s_2)/5\}\}$ with conditions $\{s_1 \leq 1/20, s_2 \leq 1/20\}$ has maximum equal to $\{0.137619, \{s_1 \rightarrow 0.05, s_2 \rightarrow 0.05\}\}$

Point number 2 of type $\{\{s_1,a,a,a,a,b\},\{s_2,(1-s_2)/4,(1-s_2)/4,(1-s_2)/4,(1-s_2)/4,0\}\}$ with conditions $\{s_1 \leq 1/20, s_2 \leq 1/20\}$ has maximum equal to $\{0.140663, \{s_1 \rightarrow 0., s_2 \rightarrow 0.05, a \rightarrow 0., b \rightarrow 1.\}\}$

Point number 3 of type $\{\{s_1,a,a,a,b,b\},\{s_2,(1-s_2)/3,(1-s_2)/3,(1-s_2)/3,0,0\}\}$ with conditions $\{s_1 \leq 1/20, s_2 \leq 1/20\}$ has maximum equal to $\{0.0925873, \{s_1 \rightarrow 0.05, s_2 \rightarrow 0.05, a \rightarrow 0.143448, b \rightarrow 0.259827\}\}$

Point number 4.1 of type $\{\{a,0,a,a,b\},\{d,c,d,d,0\}\}$ with conditions $\{a \leq 1/20, d \leq 1/20\}$ has maximum equal to $\{0.01656, \{a > 0.05, b > 0.8, c > 0.8, d > 0.05\}\}$

Point number 4.2.1 of type $\{\{0,0,a,a,b\},\{c,c,d,d,0\}\}$ with conditions $\{c \leq 1/20\}$ has maximum equal to $\{0.081, \{a > 0., b > 1., c > 0.05, d > 0.3\}\}$

Point number 4.2.2 of type $\{\{0,0,a,a,b\},\{0,c,d,d,0\}\}$ with conditions $\{\}$ has maximum equal to $\{0.09375, \{a > 0., b > 1., c > 0.25, d > 0.25\}\}$

Point number 4.2.3 of type $\{\{0,0,a,a,b\},\{1/20,c,d,d,0\}\}$ with conditions $\{\}$ has maximum equal to $\{0.140663, \{a > 0., b > 1., c > 0.2375, d > 0.2375\}\}$

Point number 4.3.1 of type $\{\{1/20,0,0,0,b\},\{s_2,c,c,c,0\}\}$ with conditions $\{s_2 \leq 1/20\}$ has maximum equal to $\{0.137448, \{s_2 > 0.05, b > 0.95, c > 0.2375\}\}$

Point number 4.3.2 of type $\{\{1/20,0,19/60,19/60,19/60,0\},\{s_2,c,d,d,0\}\}$ with conditions $\{s_2 \leq 1/20\}$ has maximum equal to $\{0.0381056, \{s_2 > 0., c > 1., d > 0.\}\}$

Point number 4.3.3 of type $\{\{1/20,0,a,a,b\},\{s_2,0,(1-s_2)/3,(1-s_2)/3,(1-s_2)/3,0\}\}$ with conditions $\{s_2 \leq 1/20\}$ has maximum equal to $\{0.0362003, \{s_2 > 0.05, a > 0., b > 0.95\}\}$

Point number 4.3.4 of type $\{\{1/20,0,19/80,19/80,19/80,19/80\},\{s_2,1-s_2,0,0,0,0\}\}$ with conditions $\{s_2 \leq 1/20\}$ has maximum equal to $\{0.140663, \{s_2 > 0.\}\}$

Point number 4.3.5 of type $\{\{1/20,0,a,a,b\},\{1/20,c,d,d,0\}\}$ with conditions $\{\}$ has maximum equal to $\{0.137448, \{a > 0., b > 0.95, c > 0.2375, d > 0.2375\}\}$

Point number 4.3.6 of type $\{\{1/20,0,a,a,b\},\{0,c,d,d,0\}\}$ with conditions $\{\}$ has maximum equal to $\{0.140663, \{a > 0.2375, b > 0.2375, c > 1., d > 0.\}\}$

Point number 5.1 of type $\{\{a,0,a,a,b,b\},\{d,c,d,d,0,0\}\}$ with conditions $\{a \leq 1/20, d \leq 1/20\}$ has maximum equal to $\{0.0350625, \{a > 0.05, b > 0.425, c > 1., d > 0.\}\}$

Point number 5.2.1 of type $\{\{0,0,a,a,b,b\},\{c,c,d,d,0,0\}\}$ with conditions $\{\}$ has maximum equal to $\{0.10368, \{a > 0.2, b > 0.3, c > 0.3, d > 0.2\}\}$

Point number 5.2.2 of type $\{\{0,0,a,a,b,b\},\{0,c,d,d,0,0\}\}$ with conditions $\{\}$ has maximum equal to $\{0.09375, \{a > 0.25, b > 0.25, c > 1., d > 0.\}\}$

Point number 5.2.3 of type $\{\{0,0,a,a,b,b\},\{1/20,c,d,d,0,0\}\}$ with conditions $\{\}$ has maximum equal to $\{0.09375, \{a > 0.25, b > 0.25, c > 0.95, d > 0.\}\}$

Point number 5.3.1 of type $\{\{1/20,0,0,0,b,b\},\{s_2,c,c,c,0,0\}\}$ with conditions $\{s_2 \leq 1/20\}$ has maximum equal to $\{0.0362003, \{s_2 > 0.05, b > 0.475, c > 0.316667\}\}$

Point number 5.3.2 of type $\{\{1/20,0,a,a,0,0\},\{s_2,c,d,d,0,0\}\}$ with conditions $\{s_2 \leq 1/20\}$ has maximum equal to $\{0., \{s_2 > 0.05, a > 0.475, c > 0., d > 0.475\}\}$

Point number 5.3.3 of type $\{\{1/20,0,a,a,b,b\},\{s_2,0,d,d,0,0\}\}$ with conditions

$\{s_2 \leq 1/20\}$ has maximum equal to $\{0.0212633, \{s_2 > 0.05, a > 0.173862, b > 0.301138, d > 0.475\}\}$

Point number 5.3.4 of type $\{\{1/20, 0, a, a, a, a\}, \{s_2, c, 0, 0, 0, 0\}\}$ with conditions $\{s_2 \leq 1/20\}$ has maximum equal to $\{0.140663, \{s_2 > 0., a > 0.2375, c > 1.\}\}$

Point number 5.3.5 of type $\{\{1/20, 0, a, a, b, b\}, \{1/20, c, d, d, 0, 0\}\}$ with conditions $\{\}$ has maximum equal to $\{0.137448, \{a > 0.2375, b > 0.2375, c > 0.95, d > 0.\}\}$

Point number 5.3.6 of type $\{\{1/20, 0, a, a, b, b\}, \{0, c, d, d, 0, 0\}\}$ with conditions $\{\}$ has maximum equal to $\{0.140663, \{a > 0.2375, b > 0.2375, c > 1., d > 0.\}\}$

Point number 6.1 of type $\{\{a, 0, 0, a, b, b\}, \{d, c, c, d, 0, 0\}\}$ with conditions $\{a \leq 1/20, d \leq 1/20\}$ has maximum equal to $\{0.02187, \{a > 0.05, b > 0.45, c > 0.45, d > 0.05\}\}$

Point number 6.2.1 of type $\{\{0, 0, 0, a, b, b\}, \{c, c, c, d, 0, 0\}\}$ with conditions $\{\}$ has maximum equal to $\{0.09375, \{a > 0., b > 0.5, c > 0.25, d > 0.25\}\}$

Point number 6.2.2 of type $\{\{0, 0, 0, a, b, b\}, \{0, c, c, d, 0, 0\}\}$ with conditions $\{\}$ has maximum equal to $\{0., \{a > 0., b > 0.5, c > 0., d > 1.\}\}$

Point number 6.2.3 of type $\{\{0, 0, 0, a, b, b\}, \{1/20, c, c, d, 0, 0\}\}$ with conditions $\{\}$ has maximum equal to $\{0.0381056, \{a > 0., b > 0.5, c > 0.316667, d > 0.316667\}\}$

Point number 6.3.1 of type $\{\{1/20, 0, 0, 0, b, b\}, \{s_2, c, c, c, 0, 0\}\}$ with conditions $\{s_2 \leq 1/20\}$ has maximum equal to $\{0.0362003, \{s_2 > 0.05, b > 0.475, c > 0.316667\}\}$

Point number 6.3.2 of type $\{\{1/20, 0, 0, a, 0, 0\}, \{s_2, c, c, d, 0, 0\}\}$ with conditions $\{s_2 \leq 1/20\}$ has maximum equal to $\{0., \{s_2 > 0., a > 0.95, c > 0., d > 1.\}\}$

Point number 6.3.3 of type $\{\{1/20, 0, 0, a, b, b\}, \{s_2, 0, 0, d, 0, 0\}\}$ with conditions $\{s_2 \leq 1/20\}$ has maximum equal to $\{0., \{s_2 > 0., a > 0., b > 0.475, d > 1.\}\}$

Point number 6.3.4 of type $\{\{1/20, 0, 0, a, a, a\}, \{s_2, c, c, 0, 0, 0\}\}$ with conditions $\{s_2 \leq 1/20\}$ has maximum equal to $\{0.0381056, \{s_2 > 0., a > 0.316667, c > 0.5\}\}$

Point number 6.3.5 of type $\{\{1/20, 0, 0, a, b, b\}, \{1/20, c, c, d, 0, 0\}\}$ with conditions $\{\}$ has maximum equal to $\{0.051543, \{a > 0.2375, b > 0.35625, c > 0.35625, d > 0.2375\}\}$

Point number 6.3.6 of type $\{\{1/20, 0, 0, a, b, b\}, \{0, c, c, d, 0, 0\}\}$ with conditions $\{\}$ has maximum equal to $\{0.0381056, \{a > 0.316667, b > 0.316667, c > 0.5, d > 0.\}\}$

Point number 7 of type $\{\{s_1, 0, (1-s_1)/4, (1-s_1)/4, (1-s_1)/4, (1-s_1)/4\}, \{0, 1, 0, 0, 0, 0\}\}$ with conditions $\{s_1 \leq 1/20\}$ has maximum equal to $\{0.140663, \{s_1 > 0.05\}\}$

Point number 8 of type $\{\{s_1, 0, 0, (1-s_1)/3, (1-s_1)/3, (1-s_1)/3\}, \{0, 1, 0, 0, 0, 0\}\}$ with conditions $\{s_1 \leq 1/20\}$ has maximum equal to $\{0.0381056, \{s_1 > 0.05\}\}$

Max attained in point 2 with value 0.1406630859375`.

EXACT VALUE OF M_4 (Unbalanced-Unbalanced distributions on different coordinates)

Point number 1 of type $\{\{1/6, 1/6, 1/6, 1/6, 1/6, 1/6\}, \{1/6, 1/6, 1/6, 1/6, 1/6, 1/6\}\}$ has maximum equal to 0.18518518518518517`

Point number 2 of type $\{\{0, 0, a, a, b, b\}, \{c, c, d, d, 0, 0\}\}$ has maximum equal to $\{0.10368, \{a \rightarrow 0.2, b \rightarrow 0.3, c \rightarrow 0.3, d \rightarrow 0.2\}\}$

Point number 3 of type $\{\{0, 0, a, a, a, b\}, \{c, c, d, d, d, 0\}\}$ has maximum equal to $\{0.192, \{a \rightarrow 0., b \rightarrow 1., c \rightarrow 0.2, d \rightarrow 0.2\}\}$

Point number 4 of type $\{\{0, 0, 1/4, 1/4, 1/4, 1/4\}, \{c, c, d, d, d, d\}\}$ has maximum equal to $\{0.140625, \{c \rightarrow 0.25, d \rightarrow 0.125\}\}$

Point number 5 of type $\{\{0, a, a, a, a, b\}, \{c, d, d, d, d, 0\}\}$ has maximum equal to $\{0.192, \{a \rightarrow 0., b \rightarrow 1., c \rightarrow 0.2, d \rightarrow 0.2\}\}$

Point number 6 of type $\{\{0, 1/5, 1/5, 1/5, 1/5, 1/5\}, \{c, d, d, d, d, d\}\}$ has maximum equal to $\{0.192, \{c \rightarrow 1., d \rightarrow 0.\}\}$

Max attained in point 3 with value 0.192`.

UPPER BOUND ON THE RATE

The bound on the rate for $b=k=6$ and $\epsilon=1/20$ is 0.0847457627118644`.