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Title: Mathematica Output for the upper bound when B=K=7 and \epsilon=9/100

EXACT VALUE OF M_1 (Balanced-Balanced distributions)

Point number 1 of type {{a,a,a,a,a,a,a},{d,d,d,d,d,d,d}} with {a,d} <= 9/100 has maximum value equal to {0.0856786,{a->0.142857,d->0.142857}}

Point number 2 of type {{0,a,a,a,a,a,a},{1-6 d,d,d,d,d,d,d}} with {a,d} <= 9/100 has maximum value equal to {0.0856759,{a->0.166667,d->0.015}}

Point number 3 of type {{0,a,a,a,a,a,1-5 a},{1-5 d,d,d,d,d,d,0}} with {a,d} <= 9/100 has maximum value equal to {0.0856679,{a->0.018,d->0.166528}}

Point number 4 of type {{0,0,a,a,a,a,a},{1/2 (1-5 d),1/2 (1-5 d),d,d,d,d,d}} with {a,d} <= 9/100 has maximum value equal to {0.0584977,{a->0.2,d->0.120882}}

Point number 5 of type {{0,0,a,a,a,a,1-4 a},{1/2 (1-4 d),1/2 (1-4 d),d,d,d,d,0}} with {a,d} <= 9/100 has maximum value equal to {0.0856589,{a->0.0225,d->0.166325}}

Point number 6 of type {{0,0,a,a,a,1/2 (1-3 a),1/2 (1-3 a)},{1/2 (1-3 d),1/2 (1-3 d),d,d,d,0,0}} with {a,d} <= 9/100 has maximum value equal to {0.0352126,{a->0.03,d->0.199693}}

Point number 7 of type {{91/100,a,a,a,a,a,a},{0,d,d,d,d,d,d}} with {a,d} <= 9/100 has maximum value equal to {0.0856759,{a->0.015,d->0.166667}}

Point number 8 of type {{91/100,a,a,a,a,a,9/100-5 a},{0,d,d,d,d,d,0}} with {a,d} <= 9/100 has maximum value equal to {0.0384,{a->0.,d->0.2}}

Point number 9 of type {{91/100,0,a,a,a,a,a},{0,1-5 d,d,d,d,d,d}} with {a,d} <= 9/100 has maximum value equal to {0.0856679,{a->0.018,d->0.166528}}

Point number 10 of type {{91/100,0,a,a,a,a,9/100-4 a},{0,1-4 d,d,d,d,d,0}} with {a,d} <= 9/100 has maximum value equal to {0.0384,{a->0.,d->0.2}}

Point number 11 of type {{91/100,0,0,a,a,a,a},{0,1/2 (1-4 d),1/2 (1-4 d),d,d,d,d}} with {a,d} <= 9/100 has maximum value equal to {0.0856589,{a->0.0225,d->0.166325}}

Point number 12 of type {{91/100,0,0,a,a,a,9/100-3 a},{0,1/2 (1-3 d),1/2 (1-3 d),d,d,d,0}} with {a,d} <= 9/100 has maximum value equal to {0.0384,{a->0.,d->0.2}}

Point number 13 of type {{91/100,a,a,a,a,a,0},{0,d,d,d,d,d,91/100}} with {a,d} <= 9/100 has maximum value equal to {0.000106793,{a->0.018,d->0.018}}

Point number 14 of type {{91/100,0,a,a,a,a,0},{0,9/100-4 d,d,d,d,d,91/100}} with {a,d} <= 9/100 has maximum value equal to {0.0000793753,{a->0.0225,d->0.0179146}}

Point number 15 of type {{91/100,0,a,a,a,9/100-3 a,0},{0,9/100-3 d,d,d,d,0,91/100}}

with {a,d} <= 9/100 has maximum value equal to {0.0000522068,{a->0.0223627,d->0.0223627}}

Point number 16 of type {{91/100,9/100,0,0,0,0,0},{0,a,(1-a)/5,(1-a)/5,(1-a)/5,(1-a)/5,(1-a)/5}} with {a} <= 9/100 has maximum value equal to {0.0856626,{a->0.163218}}

Point number 17 of type {{91/100,9/100,0,0,0,0,0},{0,0,1/5,1/5,1/5,1/5,1/5}} with {} <= 9/100 has maximum value equal to 0.0384`

Max attained in point 1 with value 0.08567858630332599`.

EXACT VALUE OF M_2 (Unbalanced-Balanced distributions)

Point number 1 of type {{a,a,a,a,a,a,a},{d,d,d,d,d,d,d}} with value {0.0856786,{a->0.142857,d->0.142857}}

Point number 2 of type {{0,a,a,a,a,a,a},{1-6 d,d,d,d,d,d,d}} with value {0.0925926,{a->0.166667,d->0.}}

Point number 3 of type {{0,a,a,a,a,a,1-5 a},{1-5 d,d,d,d,d,d,0}} with value {0.0925926,{a->0.,d->0.166667}}

Point number 4 of type {{0,0,a,a,a,a,a},{1/2 (1-5 d),1/2 (1-5 d),d,d,d,d,d}} with value {0.0584977,{a->0.2,d->0.120882}}

Point number 5 of type {{0,0,a,a,a,a,1-4 a},{1/2 (1-4 d),1/2 (1-4 d),d,d,d,d,0}} with value {0.0925926,{a->0.,d->0.166667}}

Point number 6 of type {{0,0,a,a,a,1/2 (1-3 a),1/2 (1-3 a)},{1/2 (1-3 d),1/2 (1-3 d),d,d,d,0,0}} with value {0.0384,{a->0.,d->0.2}}

Max attained in point 2 with value 0.09259259259259259`.

EXACT VALUE OF M_3 (Unbalanced-Unbalanced distributions on the same coordinate)

Point number 1 of type {{91/100,a,a,a,a,a,a},{91/100,d,d,d,d,d,d}} has maximum value equal to {5.98691*10^-6,{a->0.015,d->0.015}}

Point number 2 of type {{91/100,0,a,a,a,a,a},{91/100,9/100-5 d,d,d,d,d,d}} has maximum value equal to {5.38527*10^-6,{a->0.018,d->0.}}

Point number 3 of type {{91/100,0,a,a,a,a,9/100-4 a},{91/100,9/100-4 d,d,d,d,d,0}} has maximum value equal to {5.38527*10^-6,{a->0.,d->0.018}}

Point number 4 of type {{91/100,0,0,a,a,a,a},{91/100,1/2 (9/100-4 d),1/2 (9/100-4 d),d,d,d,d}} has maximum value equal to {4.19734*10^-6,{a->0.0225,d->0.0119564}}

Point number 5 of type {{91/100,0,0,a,a,a,9/100-3 a},{91/100,1/2 (9/100-3 d),1/2 (9/100-3 d),d,d,d,0}} has maximum value equal to {5.38527*10^-6,{a->0.,d->0.018}}

Point number 6 of type {{91/100,0,0,a,a,1/2 (9/100-2 a),1/2 (9/100-2 a)},{91/100,1/2 (9/100-2 d),1/2 (9/100-2 d),d,d,0,0}} has maximum value equal to {2.7856*10^-6,{a->0.018,d->0.018}}

Point number 7 of type {{91/100,9/100,0,0,0,0,0},{91/100,a,1/5 (9/100-a),1/5 (9/100-a),1/5 (9/100-a),1/5 (9/100-a),1/5 (9/100-a)}} has maximum value equal to {5.38527*10^-6,{a->0.}}

Point number 8 of type {{91/100,9/100,0,0,0,0,0}, {91/100,0,9/500,9/500,9/500,9/500,9/500}} has maximum value equal to 5.3852688`*^-6

Point number 9 of type {{91/100,9/100,0,0,0,0,0}, {91/100,0,0,9/400,9/400,9/400,9/400}} has maximum value equal to 2.51880890625`*^-6

Max attained in point 1 with value 5.9869125`*^-6.

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

Point number 1 of type {{91/100,a,a,a,a,a,0},{0,d,d,d,d,d,91/100}} has maximum value equal to {0.000106793,{a->0.018,d->0.018}}

Point number 2 of type {{91/100,0,a,a,a,a,0},{0,9/100-4 d,d,d,d,d,91/100}} has maximum value equal to {0.0000793753,{a->0.0225,d->0.0179146}}

Point number 3 of type {{91/100,0,a,a,a,9/100-3 a,0},{0,9/100-3 d,d,d,d,0,91/100}} has maximum value equal to {0.0000522068,{a->0.0223627,d->0.0223627}}

Point number 4 of type {{1,0,0,0,0,0,0},{0,9/500,9/500,9/500,9/500,9/500,91/100}} has maximum value equal to 0.00005754364416`

Point number 5 of type {{1,0,0,0,0,0,0},{0,0,9/400,9/400,9/400,9/400,91/100}} has maximum value equal to 0.000027986765625`

Max attained in point 1 with value 0.0001067928406272`.

UPPER BOUND ON THE RATE

The bound on the rate for b=7, k=7 and epsilon=9/100 is 0.040897467564271935` and eta_0=0.9304525328351868`