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Appendix A

Branching Data Table

Branching Data and $\mu(n_1, \dots, n_t)$ -values, $t = 3, 4, \mu \leq \frac{1}{4}$

$$\begin{aligned} \mu(l, m, n) &= 1 - \frac{1}{l} - \frac{1}{m} - \frac{1}{n} \text{ (triangles)} \\ \mu(k, l, m, n) &= 2 - \frac{1}{k} - \frac{1}{l} - \frac{1}{m} - \frac{1}{n} \text{ (quadrilaterals)} \\ \mu(n_1, \dots, n_t) &= t - 2 - \sum_{i=1}^t \frac{1}{n_i} \text{ (} t\text{-sided polygon),} \end{aligned}$$

Branching Data	μ	Branching Data	μ	Branching Data	μ
(2, 3, 7)	$\frac{1}{42}$	(2, 3, d), $d \geq 133$	$\frac{d-6}{6d}$	(2, 5, 14)	$\frac{8}{35}$
(2, 3, 8)	$\frac{1}{24}$	(2, 4, 12), (2, 6, 6), (3, 3, 6)	$\frac{1}{6}$	(2, 4, d), $47 \leq d \leq 55$	$\frac{d-4}{4d}$
(2, 4, 5)	$\frac{1}{20}$	(3, 4, 4), (2, 2, 2, 3)	$\frac{1}{6}$	(2, 4, 56), (2, 7, 8)	$\frac{13}{56}$
(2, 3, 9)	$\frac{1}{18}$	(2, 4, 13)	$\frac{9}{52}$	(2, 4, d), $57 \leq d \leq 59$	$\frac{d-4}{4d}$
(2, 3, d), $d = 10, a11$	$\frac{d-6}{6d}$	(2, 5, 8)	$\frac{7}{40}$	(2, 4, 60), (2, 5, 15)	$\frac{7}{30}$
(2, 3, 12), (2, 4, 6), (3, 3, 4)	$\frac{1}{12}$	(2, 4, d), $14 \leq d \leq 16$	$\frac{d-4}{4d}$	(2, 6, 10), (3, 3, 10)	$\frac{7}{30}$
(2, 3, d), $d = 13, 14$	$\frac{d-6}{6d}$	(2, 5, 9)	$\frac{17}{90}$	(2, 4, d), $61 \leq d \leq 79$	$\frac{d-4}{4d}$
(2, 3, 15), (2, 5, 5)	$\frac{1}{10}$	(2, 6, 7), (3, 3, 7)	$\frac{4}{21}$	(2, 4, 80), (2, 5, 16)	$\frac{19}{80}$
(2, 3, 16)	$\frac{5}{48}$	(2, 4, d), $17 \leq d \leq 19$	$\frac{d-4}{4d}$	(2, 4, d), $81 \leq d \leq 113$	$\frac{d-4}{4d}$
(2, 4, 7)	$\frac{3}{28}$	(2, 4, 20), (2, 5, 10)	$\frac{1}{5}$	(2, 5, 17)	$\frac{41}{170}$
(2, 3, 17)	$\frac{11}{102}$	(2, 4, d), $21 \leq d \leq 23$	$\frac{d-4}{4d}$	(2, 4, d), $114 \leq d \leq 131$	$\frac{d-4}{4d}$
(2, 3, d), $18 \leq d \leq 23$	$\frac{d-6}{6d}$	(2, 4, 24), (2, 6, 8), (3, 3, 8)	$\frac{5}{24}$	(2, 4, 132), (2, 6, 11), (3, 3, 11)	$\frac{8}{33}$
(2, 3, 24), (2, 4, 8)	$\frac{1}{8}$	(2, 5, 11)	$\frac{23}{110}$	(2, 4, d), $133 \leq d \leq 179$	$\frac{d-4}{4d}$
(2, 3, d), $25 \leq d \leq 29$	$\frac{d-6}{6d}$	(2, 4, d), $25 \leq d \leq 27$	$\frac{d-4}{4d}$	(2, 4, 180), (2, 5, 18)	$\frac{11}{45}$
(2, 3, 30), (2, 5, 6), (3, 3, 5)	$\frac{2}{15}$	(2, 4, 28), (2, 7, 7)	$\frac{3}{14}$	(2, 4, d), $181 \leq d \leq 251$	$\frac{d-4}{4d}$
(2, 3, d), $31 \leq d \leq 35$	$\frac{d-6}{6d}$	(2, 4, 29)	$\frac{25}{116}$	(2, 4, 252), (2, 7, 9)	$\frac{31}{126}$
(2, 3, 36), (2, 4, 9)	$\frac{5}{36}$	(2, 4, 30), (2, 5, 12), (3, 4, 5)	$\frac{13}{60}$	(2, 4, d), $253 \leq d \leq 379$	$\frac{d-4}{4d}$
(2, 3, d), $37 \leq d \leq 59$	$\frac{d-6}{6d}$	(2, 4, d), $31 \leq d \leq 35$	$\frac{d-4}{4d}$	(2, 4, 380), (2, 5, 19)	$\frac{47}{190}$
(2, 3, 60), (2, 4, 10)	$\frac{3}{20}$	(2, 4, 36), (2, 6, 9), (3, 3, 9)	$\frac{2}{9}$	(2, 4, d), $d \geq 381$	$\frac{d-4}{4d}$
(2, 3, d), $61 \leq d \leq 104$	$\frac{d-6}{6d}$	(2, 4, 37)	$\frac{33}{148}$	(2, 5, 20), (2, 6, 12), (2, 8, 8)	$\frac{1}{4}$
(2, 3, 105), (2, 5, 7)	$\frac{11}{70}$	(2, 5, 13)	$\frac{29}{130}$	(3, 3, 12), (3, 4, 6), (4, 4, 4)	$\frac{1}{4}$
(2, 3, d), $106 \leq d \leq 131$	$\frac{d-6}{6d}$	(2, 4, d), $38 \leq d \leq 46$	$\frac{d-4}{4d}$	(2, 2, 2, 4)	$\frac{1}{4}$
(2, 3, 132), (2, 4, 11)	$\frac{1}{44}$				