Math 724, Fall 2021
Notation/LaTeX Reference Sheet (last update: 8/19/21)

Bogart's problem symbols

- • Essential
- ○ Motivational
- + Summary
- → Especially interesting
- * Difficult
- · Essential for this or the next section

Notation list (starred items are macros from the Math 724 header file)

Symbol	Meaning		LaTeX	Reference
$[n]$	The set $\{1, 2, \dots, n\}$			
N^M	Functions $m \to N$	*	`N^M`	p.7
$n^{\underline{k}}$	Falling factorial	*	`\fallfac{n}{k}`	p.8
$\binom{n}{k}$	Binomial coefficient	*	`\binom{n}{k}`	p.11
χ_S	Characteristic function	*	`\chi_S`	p.14
C_n	Catalan number			p.22
K_n	Complete graph on n vertices			p.26
$R(m, n)$	Ramsey number			p.26
$G - e$	deletion			p.47
G/e	contraction			p.47
$n^{\overline{k}}$	Rising factorial	*	`\risefac{n}{k}`	p.55
$S(k, n)$	Stirling number of the second kind			p.58
$B(k)$	Bell number			p.59
$\binom{k}{j_1, \dots, j_n}$	Multinomial coefficient	*	`\binom{k}{j_1,\dots,j_n}`	p.60
$P(k)$	Number of partitions of k			p.63
$P(k, n)$	No. of part'ns of k into n parts			p.63
$Q(k, n)$	No. of part'ns of k into n distinct parts			p.69
Fruit symbols			I have no idea	p.73
$\begin{bmatrix} n \\ k \end{bmatrix}_q$	q-binomial coefficient	*	`\qbin{n}{k}`	p.84
S_n	Symmetric group on n letters			p.106
D_n	Dihedral group of order $2n$			p.108
C_n	Cyclic group of order n			p.113
Gx	Orbit of a group action			p.119
Gx_{multi}	Multiorbit of a group action	*	`Gx_{\textrm{multi}}`	p.120
$\mathrm{Fix}(x)$	Stabilizer of x	*	`\Fix(x)`	p.121