

6 Tables

Numbers of trees

	v = 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
trees	1	1	1	2	3	6	11	23	47	106	235	551	1301		
uni-centered trees	1	0	1	1	2	3	7	12	27	55	128	285			
uni-centroidal trees	1	0	1	1	3	3	11	13	47	61	235	341	1301		
co-central trees \odot	1	0	1	1	2	2	6	7	20	27	83	126			
asymmetric trees*	1	0	0	0	0	0	1	1	3	6	15	29	67		
irreducible trees*	1	1	0	1	1	2	2	4	5	10	14	26	42	78	132
rooted trees*	1	1	2	4	9	20	48	115	286	719	1842	4766	12 486		

* computed by Allen Schwenk, University of Michigan

Number of trees with v vertices
and maximum degree Δ

Δ	$v = 1$	2	3	4	5	6	7	8	9	10	11	12	13
2	0	1	1	1	1	1	1	1	1	1	1	1	1
3				1	1	3	5	10	17	36	65	134	264
4					1	1	3	7	17	38	93	220	537
5						1	1	3	7	19	45	118	296
6							1	1	3	7	19	47	125
7								1	1	3	7	19	47
8									1	1	3	7	19
9										1	1	3	7
10											1	1	3
11												1	1
12													1

Number of forests (acyclic graphs)
with v vertices and ω components

v	$\omega = 1$	2	3	4	5	6	7	8	9	10	11	12	13	14	15	totals
1	1															1
2	1	1														2
3	1	1	1													3
4	2	2	1	1												6
5	3	3	2	1	1											10
6	6	6	4	2	1	1										20
7	11	11	7	4	2	1	1									37
8	23	23	14	8	4	2	1	1								76
9	47	46	29	15	8	4	2	1	1							153
10	106	99	60	32	16	8	4	2	1	1						329
11	235	216	128	66	33	16	8	4	2	1	1					710
12	551	488	284	143	69	34	16	8	4	2	1	1				1601
13	1301	1121	636	315	149	70	34	16	8	4	2	1	1			3658
14	3159	2644	1467	710	330	152	71	34	16	8	4	2	1	1		8599
15	7741	6334	3440	1631	742	336	153	71	34	16	8	4	2	1	1	20 514