

$\sqrt{91}$   
 $\sqrt{94}$

$g=0$

Goes with Report #3  
~~57401~~

6294  
 ebr

1-1	2	5	14	42	132	429	= A0346 ✓
1	5	22	93	386	1586	6476	A0184 ✓
	2	28	164	1030	5863	31388	A0365 ✓
		5	93	1030	8885	65954	A0473
			14	386	5868		A0502
				42	1586		
					132		

A6294

$g=1$

1-10	70	420	2310	—————	A2802
10	167	1720	14065	—————	A6295
	70	1720	24164	—————	A6296
		420	14065		

A6297

extension #1 (reference 10 of subunit #3)

e	v	g=0	g=1	g=2	g=3	g=4	g=5
12	1	208012	29745716	1293938646	20465052608	111159740692	158959754226
12	2	7036530	678405090	19678611645	196924458720	600398249550	354949166565
12	3	84876152	5593305476	106853266632	647739636160	993494827480	158959754226
12	4	505403910	22620890127	276221817810	945068384880	600398249550	
12	5	1697186964	50534154408	375708427812	647739636160	111159740692	
12	6	3435601554	65723863196	276221817810	196924458720		
12	7	4331674512	50534154408	106853266632	20465052608		
12	8	3435601554	22620890127	19678611645			
12	9	1697186964	5593305476	1293938646			
12	10	505403910	678405090				
12	11	84876152	29745716				
12	12	7036530					
12	13	208012					
13	1	742900	135207800	7808250450	174437377400	1480593013900	4034735959800
13	2	28354132	3550829360	140725699686	2079913241120	10743797911132	14805457339920
13	3	390331292	34225196720	925572602058	8789123742880	25766235457300	14805457339920
13	4	2687477780	164767964504	2979641557620	17326957790896	25766235457300	4034735959800
13	5	10596579708	448035881592	5235847653036	17326957790896	10743797911132	
13	6	25658464260	729734918432	5235847653036	8789123742880	1480593013900	
13	7	39599553708	729734918432	2979641557620	2079913241120		
13	8	39599553708	448035881592	925572602058	174437377400		
13	9	25658464260	164767964504	140725699686			
13	10	10596579708	34225196720	7808250450			
13	11	2687477780	3550829360				
13	12	390331292	135207800				
13	13	28354132					
13	14	742900					

g=6, v=1: 24325703325

g=6, v=1: 2208143028375  
g=6, v=2: 2208143028375

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extension, p2

e	v	g=0	g=1	g=2	g=3	g=4	g=5
14	1	2674440	608435100	45510945480	1384928666550	17302190625720	79553497760100
14	2	114159428	18182708362	955708437684	19925913354061	160576594766588	420797306522502
14	3	1775032504	201976335288	7454157823560	104395235785256	517592962672296	691650582088536
14	4	13957496098	1137369687454	29079129795702	264477214235234	750260619502310	420797306522502
14	5	63663115880	3682811916980	63648856688592	357391270819604	517592962672296	79553497760100
14	6	181055975100	7302676928666	82234427131416	264477214235234	160576594766588	
14	7	334301273592	9145847808784	63648856688592	104395235785256	17302190625720	
14	8	409230997461	7302676928666	29079129795702	19925913354061		
14	9	334301273592	3682811916980	7454157823560	1384928666550	g=6, v=1:	100940771124360
14	10	181055975100	1137369687454	955708437684		g=6, v=2:	223790013148500
14	11	62663115880	201976335288	45510945480		g=6, v=3:	100940771124360
14	12	13957496098	18182708362			g=7, v=1:	14230536445125
14	13	1775032504	608435100				
14	14	114159428					
14	15	2674440					

The numbers needed to extend this table from 11 to 14 edges were calculated on the IBM 360-75 at the University of Waterloo and became available only after the pages had been numbered and 7 copies made of the thesis. The improvement in the program needed to compute these numbers was suggested by Prof. G. Berman. The corresponding extension of Table 1 has not been included because it would add over 100 pages to an already bulky thesis.

to extend this table to 14 edges,  
 the columns of 'extension,  $p_1$  and  $p_2$ ' have to be added up

168

6300

6301

TABLE 4: THE NUMBER OF ROOTED GENUS  $g$  MAPS WITH  $e$  EDGES

$e \backslash g$	0	1	2	3	4	5
0	1					
1	2					
2	9	1				
3	54	20				
4	378	307	21			
5	2916	4280	966			
6	24054	56914	27954	1485		
7	208494	736586	650076	113256		
8	1876446	9370183	13271982	5008230	225225	
9	17399772	117822512	248371380	167808024	24635754	
10	165297834	1469283166	4366401128	4721384790	1495900107	59520825
11	1602117468	18210135416	73271116024	117593590752	66519597474	8608033980

CONJECTURE (LEHMAN): The number of rooted genus  $g$  maps with  $e$  edges is not greater than the number of rooted genus  $g$  maps with  $e$  edges and one vertex

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