

Sheet1

Tiered

failing test case

4 Blocks, 64 bytes

freelist length	freelist[kB]	unused bytes in cb	segmap[kB]	max_used	wasted	memory overhead
3085	2299	902	274	16436	3475	21.14%
3993	3366	887	283	16959	4536	26.75%
3843	2204	900	273	16377	3377	20.62%
3859	2260	898	273	16382	3431	20.94%
3860	2250	897	273	16385	3420	20.87%
						22.07%

4 Blocks, 128 bytes

freelist length	freelist[kB]	unused bytes in cb	segmap[kB]	max_used	wasted	memory overhead
474	1020	2073	137	17451	3230	18.51%
504	1192	2064	136	17413	3392	19.48%
484	1188	2064	126	17414	3378	19.40%
438	1029	2061	136	17399	3226	18.54%
					0	18.98%

Nashorn

4 Blocks, 64 bytes

freelist length	freelist[kB]	unused bytes in cb	segmap[kB]	max_used	wasted	memory overhead
709	1190	662	1198	76118	3050	4.01%
688	4200	635	1234	78448	6069	7.74%
707	2617	648	1178	74343	4443	5.98%
685	1703	660	1205	76903	3568	4.64%
760	1638	675	1174	74563	3487	4.68%
						5.41%

4 Blocks, 128 bytes

freelist length	freelist[kB]	unused bytes in cb	segmap[kB]	max_used	wasted	memory overhead
206	824	1253	607	77469	2684	3.46%
247	2019	1265	583	74017	3867	5.22%
239	958	1230	641	81588	2829	3.47%
226	1477	1246	595	76119	3318	4.36%
225	2390	1239	596	76051	4225	5.56%
						4.41%

compiler.compiler (java -XX:CodeCacheSegmentSize=256 -XX:+PrintCodeCache -jar SPECjvm2008.jar -ikv

compiler.compiler

4 Blocks, 64 bytes

freelist length	freelist[kB]	unused bytes in cb	segmap[kB]	max_used	wasted	memory overhead
440	943	263	298	18133	1504	8.29%
458	480	272	295	18443	1047	5.68%
536	1278	260	306	18776	1844	9.82%
426	684	268	304	18789	1256	6.68%
503	1430	258	310	18872	1998	10.59%

4 Blocks, 128 bytes

freelist length	freelist[kB]	unused bytes in cb	segmap[kB]	max_used	wasted	memory overhead
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163	984	510	157	19233	1651	8.58%
132	729	492	151	18614	1372	7.37%
187	1212	498	152	18630	1862	9.99%
198	1268	496	155	18974	1919	10.11%
225	1268	496	152	18679	1916	10.26%
						9.26%

Tiered

failing test case

1Blocks, 256 bytes

freelist length	freelist[kB]	unused bytes in cb	segmap[kB]	max_used	wasted	memory overhead
2831	2145	2102	73	17961	4320	24.05%
2807	1855	2099	71	17565	4025	22.91%
2960	2933	2089	74	18272	5096	27.89%
2881	2401	2096	73	17989	4570	25.40%
2918	1945	2095	71	17523	4111	23.46%
						24.74%

1 Blocks, 512 bytes

freelist length	freelist[kB]	unused bytes in cb	segmap[kB]	max_used	wasted	memory overhead
2642	2045	3891	39	19236	5975	31.06%
2828	2978	3878	40	19767	6896	34.89%
2654	2049	3893	40	19299	5982	31.00%
2679	2068	3893	40	19321	6001	31.06%
2818	3242	3876	41	19983	7159	32.00%
						32.00%

Nashorn

1 Blocks, 256 bytes

freelist length	freelist[kB]	unused bytes in cb	segmap[kB]	max_used	wasted	memory overhead
821	4263	1609	315	80137	6187	7.72%
929	2937	1648	297	75164	4882	6.50%
875	2407	1654	297	75773	4358	5.75%
917	1172	1643	300	76324	3115	4.08%
902	2096	1659	311	78951	4066	5.15%
						5.84%

1 Blocks, 512 bytes

freelist length	freelist[kB]	unused bytes in cb	segmap[kB]	max_used	wasted	memory overhead
426	856	2965	147	75097	3968	5.28%
491	2529	2979	156	79934	5664	7.09%
482	1829	3042	152	77944	5023	6.44%
527	3479	2988	157	80227	6624	8.26%
525	2746	3015	151	76929	5912	7.69%
						6.95%

compiler.compiler

1 Block, 256 bytes

freelist length	freelist[kB]	unused bytes in cb	segmap[kB]	max_used	wasted	memory overhead
484	957	581	76	18686	1614	8.64%

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547	1387	599	80	19221	2066	10.75%
459	906	590	76	18603	1572	8.45%
502	1152	597	78	19058	1827	9.59%
503	813	591	76	18861	1480	7.85%
						9.05%
1 Blocks, 512 bytes						
freelist length	freelist[kB]	unused bytes in cb	segmap[kB]	max_used	wasted	memory overhead
292	1345	1163	40	20028	2548	12.72%
228	901	1177	39	19528	2117	10.84%
271	864	1161	39	19229	2064	10.73%
203	880	1180	40	19887	2100	10.56%
309	1392	1148	40	20013	2580	12.89%
						11.55%

-client (32-bit)

failing test case						
1 Blocks, 64 bytes						
freelist length	freelist[kB]	unused bytes in cb	segmap[kB]	max_used	wasted	memory overhead
14	2	130	100	6402	232	3.62%
same, since -Xcomp					0	#DIV/0!
					0	#DIV/0!
					0	#DIV/0!
					0	#DIV/0!
					0	#DIV/0!
1 Block, 128 bytes						
freelist length	freelist[kB]	unused bytes in cb	segmap[kB]	max_used	wasted	memory overhead
10	2	312	41	6583	355	5.39%
same, since -Xcomp					0	#DIV/0!
					0	#DIV/0!
					0	#DIV/0!
					0	#DIV/0!

Nashorn

1 Blocks, 64 bytes						
freelist length	freelist[kB]	unused bytes in cb	segmap[kB]	max_used	wasted	memory overhead
266	1341	202	169	10593	1712	16.16%
255	1681	203	175	10863	2059	18.95%
289	1559	200	172	10692	1931	18.06%
264	1997	200	178	11426	2375	20.79%
286	1277	201	168	10414	1646	15.81%
						17.95%
1 Blocks, 128 bytes						
freelist length	freelist[kB]	unused bytes in cb	segmap[kB]	max_used	wasted	memory overhead
188	922	354	86	10799	1362	12.61%
193	1927	343	90	11389	2360	20.72%
165	735	356	86	10943	1177	10.76%

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196	1806	340	88	11259	2234	19.84%
194	1295	347	86	10770	1728	16.04%
						16.00%

compiler.compiler						
1 Block, 64 bytes						
freelist length	freelist[kB]	unused bytes in cb	segmap[kB]	max_used	wasted	memory overhead
14	1	107	90	5789	198	3.42%
7	0	107	90	5786	197	3.40%
16	5	107	90	5808	202	3.48%
19	2	105	89	5749	196	3.41%
6	0	107	90	5792	197	3.40%
						3.42%
1 Blocks, 128 bytes						
freelist length	freelist[kB]	unused bytes in cb	segmap[kB]	max_used	wasted	memory overhead
4	0	212	46	5908	258	4.37%
3	0	185	42	5402	227	4.20%
3	0	189	42	5495	231	4.20%
4	0	185	42	5407	227	4.20%
4	0	186	42	5421	228	4.21%
						4.24%

server non-tiered (64-bit)

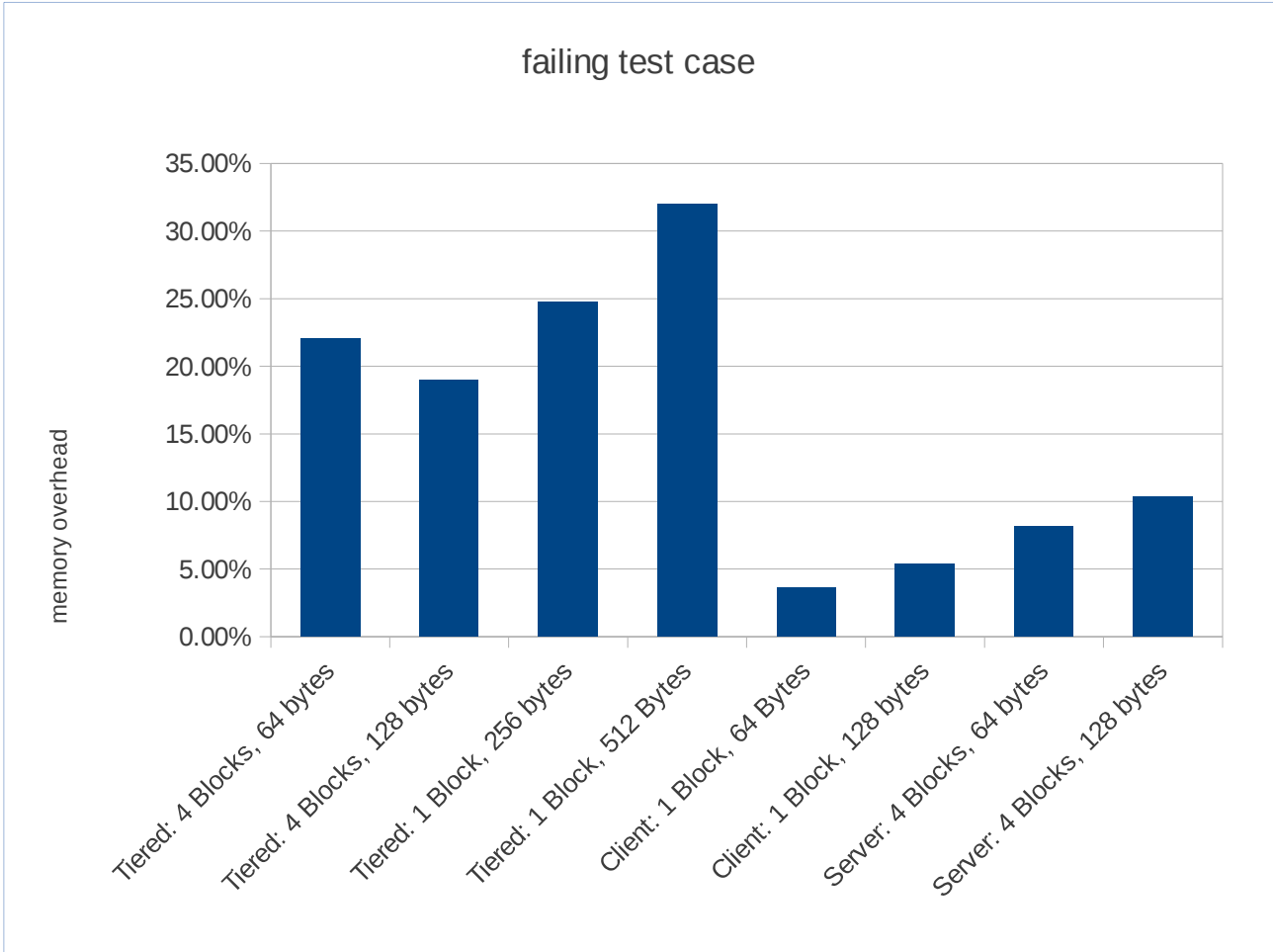
failing test case						
4 Blocks, 64 bytes						
freelist length	freelist[kB]	unused bytes in cb	segmap[kB]	max_used	wasted	memory overhead
181	81	734	184	12356	999	8.09%
182	75	730	193	12347	998	8.08%
177	81	733	194	12353	1008	8.16%
164	74	734	193	12351	1001	8.10%
178	83	732	194	12353	1009	8.17%
						8.12%
4 Blocks, 128 bytes						
freelist length	freelist[kB]	unused bytes in cb	segmap[kB]	max_used	wasted	memory overhead
4	14	1201	100	12818	1315	10.26%
7	16	1204	100	12821	1320	10.30%
12	27	1202	100	12822	1329	10.36%
11	26	1197	100	12817	1323	10.32%
13	26	1202	100	12822	1328	10.36%
						10.32%

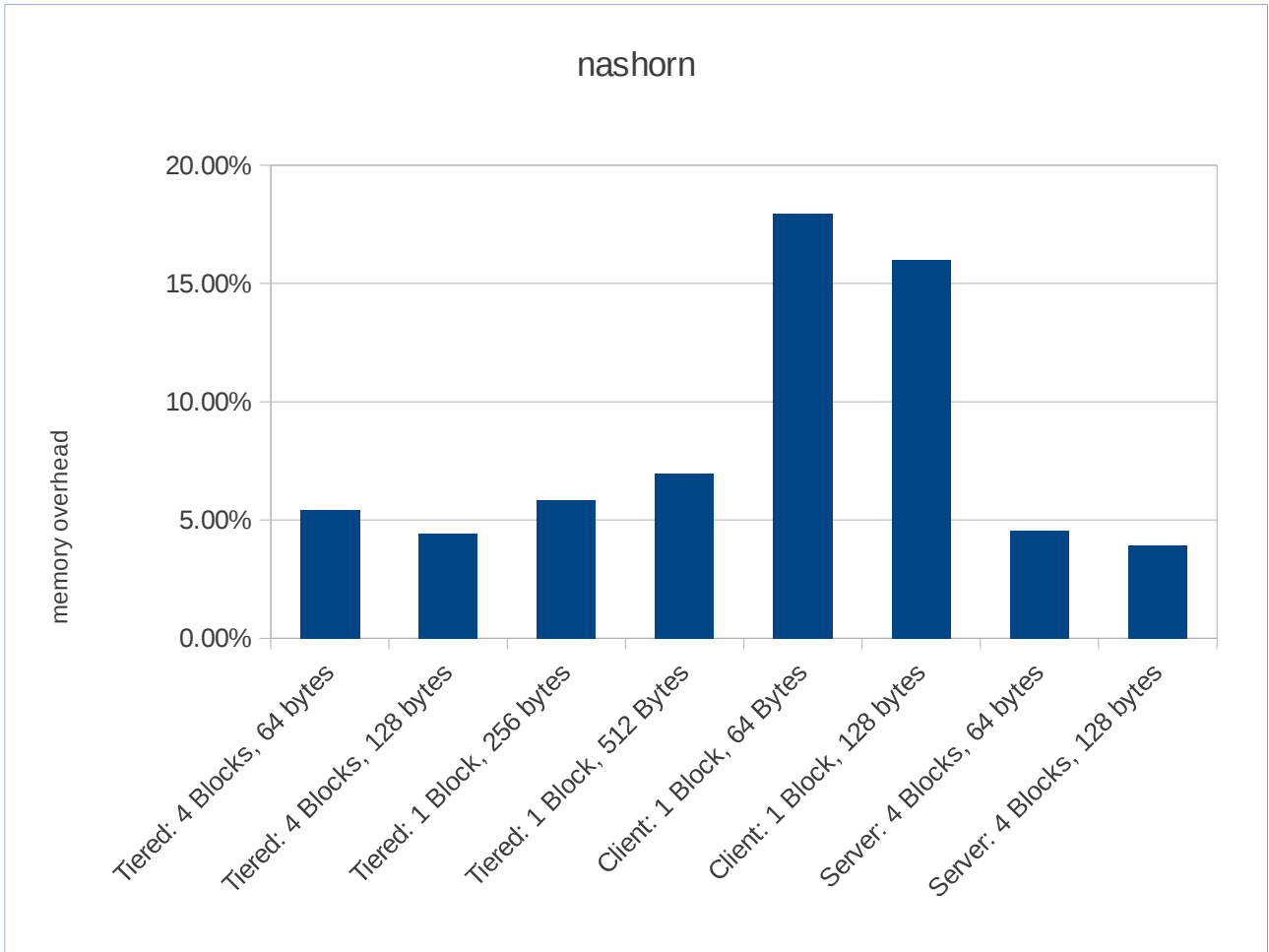
Nashorn						
4 Blocks, 64 bytes						
freelist length	freelist[kB]	unused bytes in cb	segmap[kB]	max_used	wasted	memory overhead
282	99	373	274	17468	746	4.27%
269	90	367	290	12999	747	5.75%
242	80	371	265	16936	716	4.23%
263	90	374	287	18340	751	4.09%

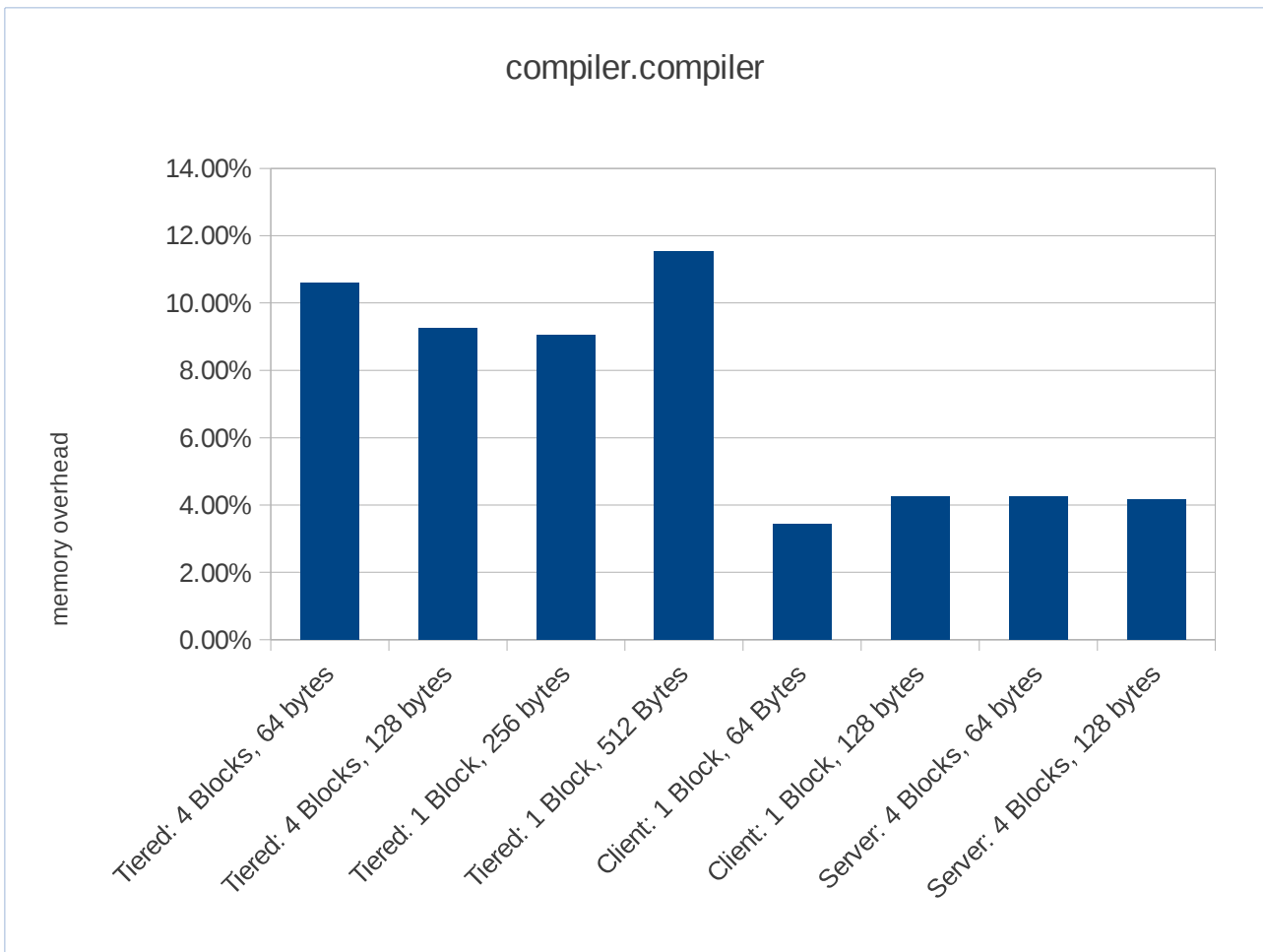
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264	100	358	261	16625	719	4.32%
						4.53%
4 Blocks, 128 bytes						
freelist length	freelist[kB]	unused bytes in cb	segmap[kB]	max_used	wasted	memory overhead
12	24	647	137	17600	808	4.59%
4	14	660	133	17080	807	4.72%
4	13	667	135	17339	815	4.70%
13	29	659	151	19378	839	4.33%
10	25	67	133	17110	225	1.32%
						3.93%

compiler.compiler						
4 Block, 64 bytes						
freelist length	freelist[kB]	unused bytes in cb	segmap[kB]	max_used	wasted	memory overhead
165	74	132	122	7756	328	4.23%
166	72	134	132	7843	338	4.31%
170	77	135	126	8051	338	4.20%
196	80	131	122	7749	333	4.30%
175	76	135	125	7926	336	4.24%
						4.25%
4 Blocks, 128 bytes						
freelist length	freelist[kB]	unused bytes in cb	segmap[kB]	max_used	wasted	memory overhead
2	15	254	61	7871	330	4.19%
3	18	245	62	8011	325	4.06%
4	16	255	63	8139	334	4.10%
5	20	253	62	7958	335	4.21%
4	16	254	62	7936	332	4.18%
						4.15%







Run		
	1	
	2	
	3	
	4	
	5	
Average		failing test case
		Tiered: 4 Blocks, 64 bytes 22.07%
		Tiered: 4 Blocks, 128 bytes 18.98%
		Tiered: 1 Block, 256 bytes 24.74%
		Tiered: 1 Block, 512 Bytes 32.00%
	1	Client: 1 Block, 64 Bytes 3.62%
	2	Client: 1 Block, 128 bytes 5.39%
	3	Server: 4 Blocks, 64 bytes 0.0812014007
	4	Server: 4 Blocks, 128 bytes 0.1031980881
Average		

	1
	2
	3
	4
	5
Average	
	1
	2
	3
	4
	5
Average	

-it 60 -wt 30 -bt 1 compiler.compiler)

		nashorn
	1	
	2	Tiered: 4 Blocks, 64 bytes 5.41%
	3	Tiered: 4 Blocks, 128 bytes 4.41%
	4	Tiered: 1 Block, 256 bytes 5.84%
	5	Tiered: 1 Block, 512 Bytes 6.95%
Average		Client: 1 Block, 64 Bytes 17.95%
		Client: 1 Block, 128 bytes 16.00%
		Server: 4 Blocks, 64 bytes 4.53%
		Server: 4 Blocks, 128 bytes 3.93%

	1
	2
	3
	4
	5
Average	

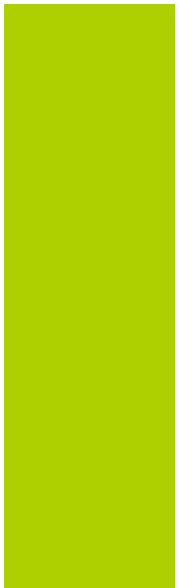
	1
	2
	3
	4
	5
Average	
	1
	2
	3
	4
	5
Average	

	compiler.compiler
Tiered: 4 Blocks, 64 bytes	10.59%
Tiered: 4 Blocks, 128 bytes	9.26%
Tiered: 1 Block, 256 bytes	9.05%
Tiered: 1 Block, 512 Bytes	11.55%
Client: 1 Block, 64 Bytes	3.42%
Client: 1 Block, 128 bytes	4.24%
Server: 4 Blocks, 64 bytes	4.25%
Server: 4 Blocks, 128 bytes	4.15%

	1
	2
	3
	4
	5
Average	
	1
	2
	3
	4
	5
Average	

	1
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Average	2	
	3	
	4	
	5	
Average	1	
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	3	
	4	
	5	



Average	1
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Average	1
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Average	5
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	3
	4
	5
Average	

	1
	2
	3
	4
	5
Average	
	1
	2
	3
	4
	5
Average	

Sheet2

	free list size	bytes in freelist
Test case, 4 blocks, 64 bytes	3396	2120
	3434	1855
	3355	3202
Test case – first fit	3340	1835
	3321	2068
	3285	1983
Test case – first fit, 1 Block, 32 bytes	5238	2856
	5281	2995
Test case – first fit, 1 Block, 64 bytes	5247	2178
	5300	2120
	5291	2413
Test case – first fit, 1 Block, 128 bytes	4395	2044
	4446	2028
	4425	2495
Test case – first fit, 1 Block, 256 bytes	2963	2008
	2935	1933
	2901	1789
Test case – first fit, 1 Block, 512 bytes	1812	2293
	1817	2422
	1772	1608
Test case – first fit, 16 blocks, 32 bytes	360	931
	484	1989
	481	1322
Test case – first fit, 4 blocks, 128 bytes	1105	1838
	1125	1905
	914	1392
Test case – first fit		

unused bytes at the end

994	3114
1002	2857
998	4200
	3390.333333

998	2833
998	3066
1011	2994
	2964.333333

308	3164
306	3301

729	2907
729	2849
726	3139
	2965

1165	3209
1167	3195
1166	3661
	3355

2096	4104
2098	4031
2102	3891
	4008.666667

3886	6179
3931	6353
3889	5497

1603	2534
1592	3581
1586	2908
	3007.666667

2090	3928
2095	4000
2111	3503
	3810.333333