

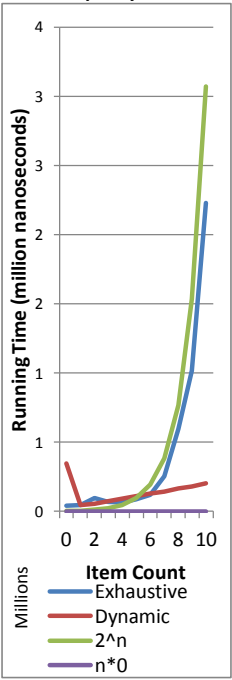
Appendix B - Knapsack Algorithms' Running Times

Capacity 0		
Item Count	Exhaustive	Dynamic
0	39.574	347.068
1	45.726	44.220
2	98.225	56.645
3	68.596	72.373
4	65.773	94.034
5	85.865	109.708
6	120.500	127.026
7	255.842	144.038
8	595.069	167.759
9	1.015.410	179.181
10	2.229.227	203.056

(300 samples)

(nanoseconds)

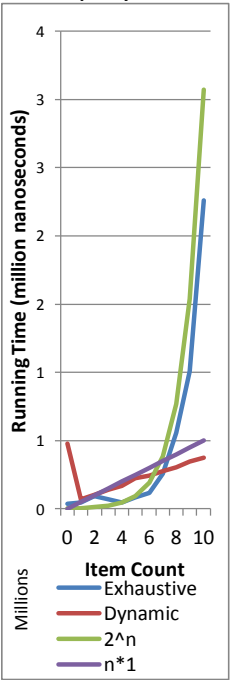
capacity = 0



20		
Exhaustive	Dynamic	
38.137	480.581	
46.112	69.348	
95.627	103.504	
70.969	140.848	
46.057	170.339	
84.197	224.887	
119.247	245.860	
258.995	275.214	
557.331	304.797	
1.008.316	346.623	
2.259.510	377.305	

(nanoseconds)

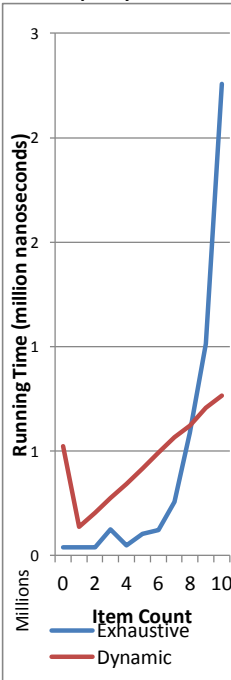
capacity = 20



40		
Exhaustive	Dynamic	
38.429	523.540	
40.389	137.624	
40.804	205.233	
123.692	273.862	
47.004	341.271	
105.153	416.144	
120.497	492.284	
257.212	566.429	
586.860	621.240	
1.013.770	706.412	
2.257.871	766.691	

(nanoseconds)

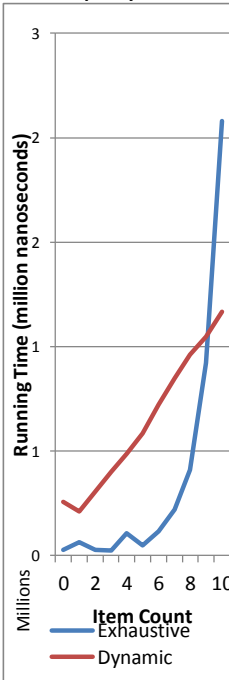
capacity = 40



60		
Exhaustive	Dynamic	
27.792	256.407	
63.308	209.720	
26.473	305.153	
24.502	400.731	
105.451	488.078	
48.715	585.758	
115.759	721.597	
220.492	847.490	
410.604	962.498	
922.149	1.046.235	
2.078.488	1.165.460	

(nanoseconds)

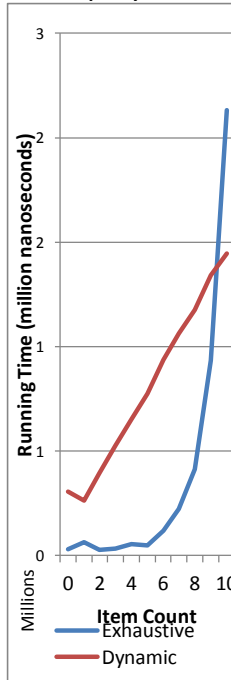
capacity = 60



80		
Exhaustive	Dynamic	
29.124	305.710	
64.178	263.301	
26.923	393.814	
32.186	525.562	
55.565	651.451	
48.550	774.520	
118.350	937.813	
223.585	1.063.171	
413.494	1.175.930	
932.991	1.341.709	
2.130.729	1.445.661	

(nanoseconds)

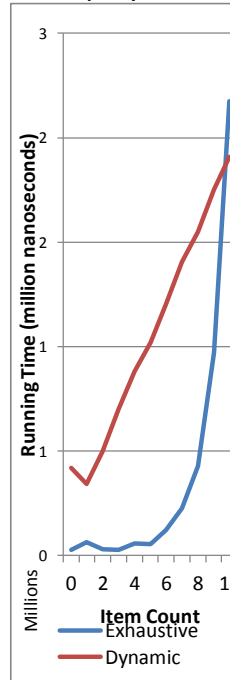
capacity = 80



100		
Exhaustive	Dynamic	
27.349	419.783	
64.960	343.256	
29.701	500.246	
28.552	700.002	
58.976	883.439	
53.657	1.020.030	
123.286	1.204.919	
227.374	1.407.172	
429.096	1.549.217	
971.978	1.753.286	
2.174.592	1.908.882	

(nanoseconds)

capacity = 100



Other			
2^n	n*0	n*1	
3.000	0	0	
6.000	0	50.000	
12.000	0	100.000	
24.000	0	150.000	
48.000	0	200.000	
96.000	0	250.000	
192.000	0	300.000	
384.000	0	350.000	
768.000	0	400.000	
1.536.000	0	450.000	
3.072.000	0	500.000	

(*3000)

(*50000)