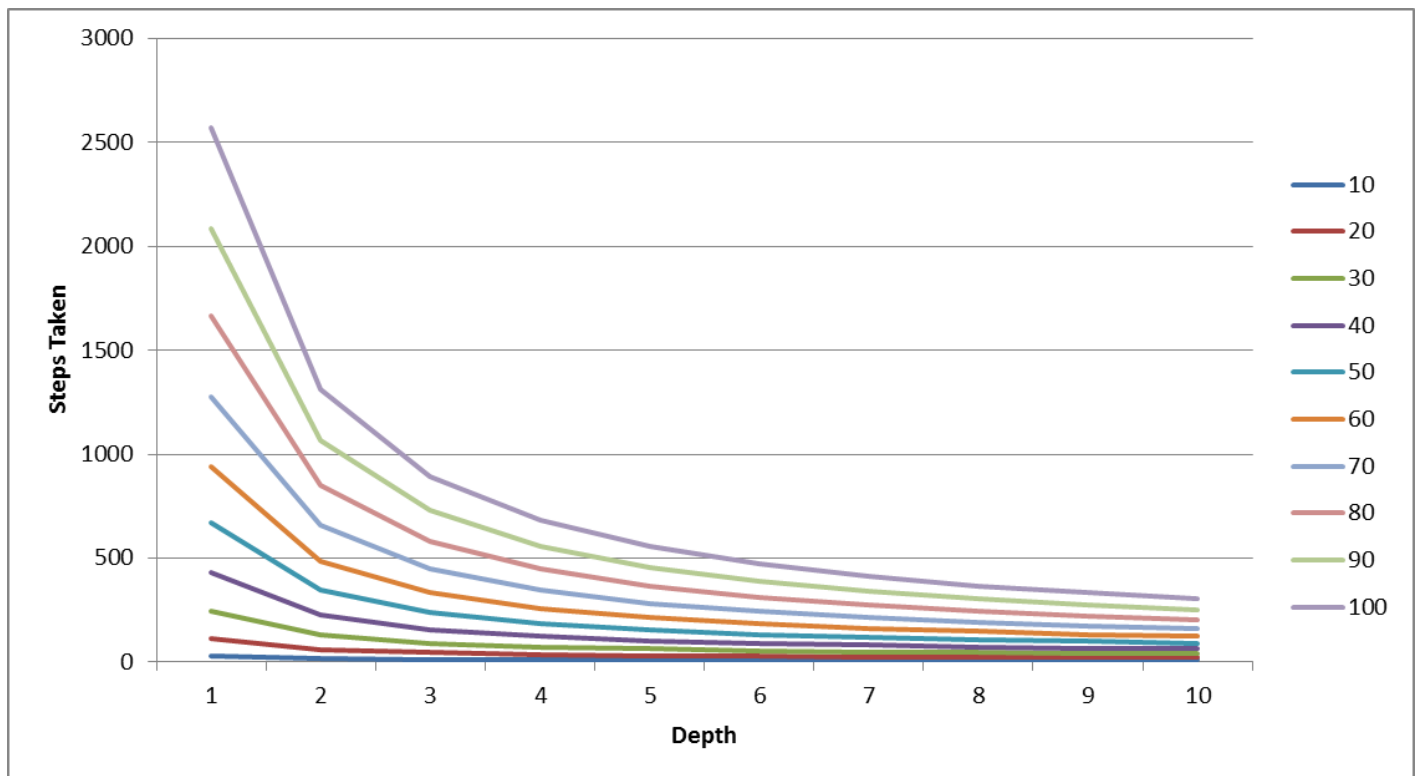


Each pile size, ranging from 10 to 100, was run through the program with varying depth levels ranging from 1 through to 10. Each depth level for each pile size was repeated 100 times so that an accurate average could be calculated.



A steep decline in the amount of steps is clearly visible in the graph when we scan the pile at smaller depths (1-4) and is more apparent with the larger pile sizes. The amount of steps starts decreasing heavily at the beginning but then flattens so that only a smaller amount of steps is reduced with each depth increment in the latter stages of testing.

Pile Size	Depth										
	1	2	3	4	5	6	7	8	9	10	
	10	32	19	14	12	11	11	10	10	10	9
	20	113	62	45	37	32	29	26	25	24	23
	30	245	130	92	74	63	54	50	46	43	41
	40	433	227	158	124	103	91	81	73	68	64
	50	668	348	242	187	154	134	119	107	99	92
	60	941	485	334	259	215	183	162	147	134	125
	70	1276	656	450	349	284	244	215	194	176	161
	80	1666	850	582	448	368	314	274	245	224	206
90	2087	1068	728	556	456	389	341	305	276	254	
100	2571	1311	891	682	557	472	413	368	334	304	

The average number of steps increases greatly with each increase of pile size; the size of most pile sizes almost double. The decrease in pile size with each increment of depth is also large, almost halving the amount of steps taken with each increment of depth. Smaller pile sizes will flatten at smaller depths than larger pile sizes. This is because as the depth increases, the chance that the exam that will be graded will be found increases, therefore decreasing the amount of steps needed.