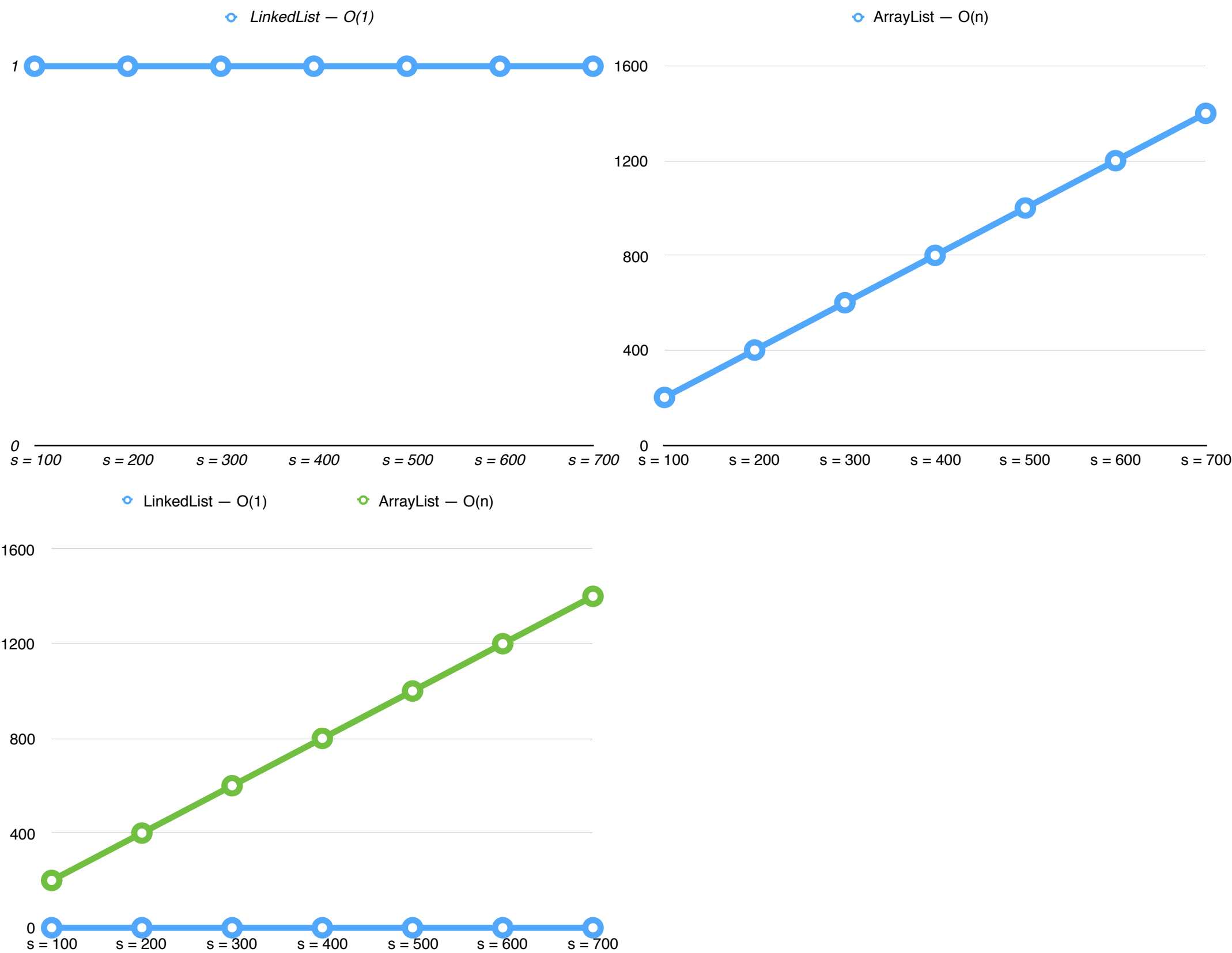
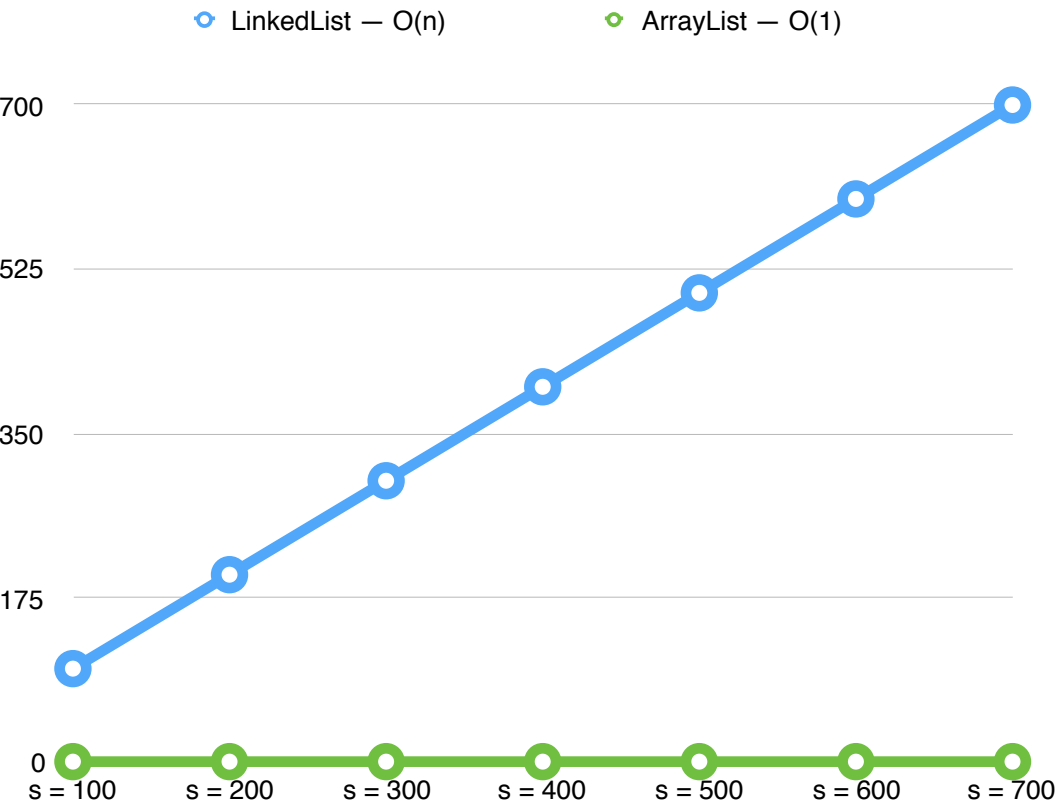
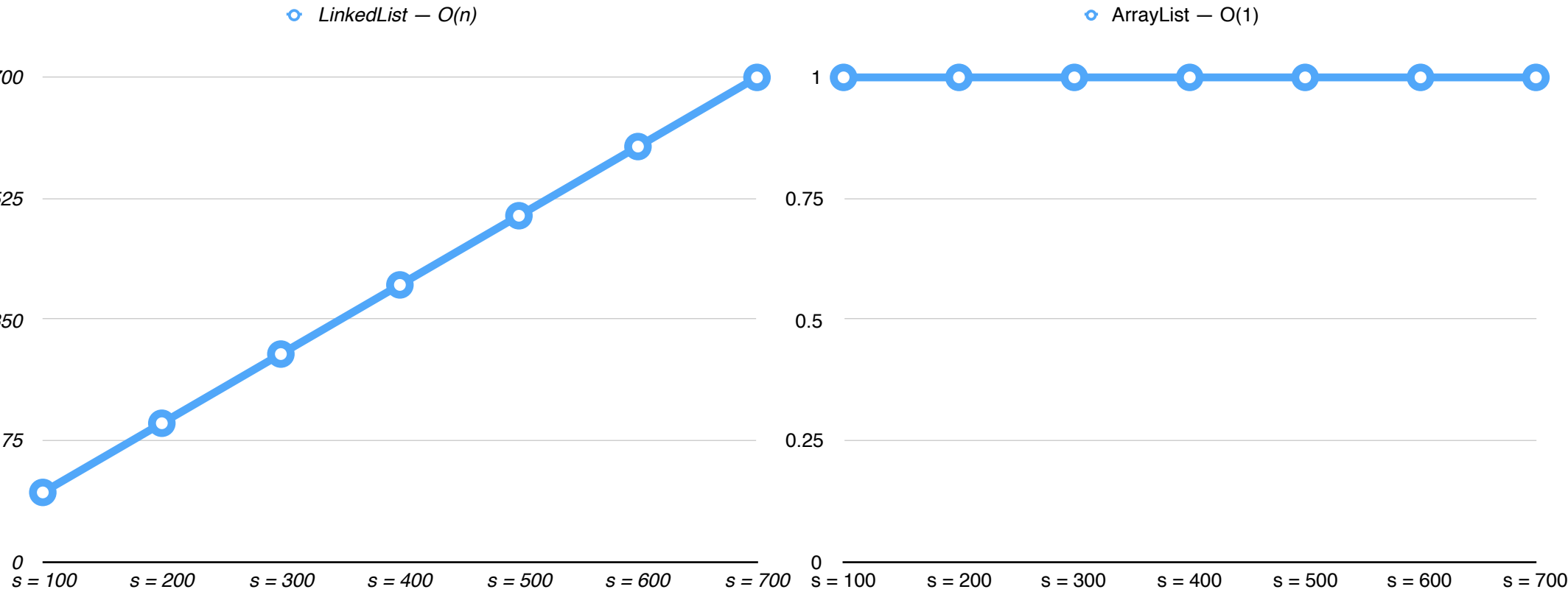


Insert Front

	s = 100	s = 200	s = 300	s = 400	s = 500	s = 600	s = 700
LinkedList — O(1)	1	1	1	1	1	1	1
ArrayList — O(n)	201	401	601	801	1001	1201	1401

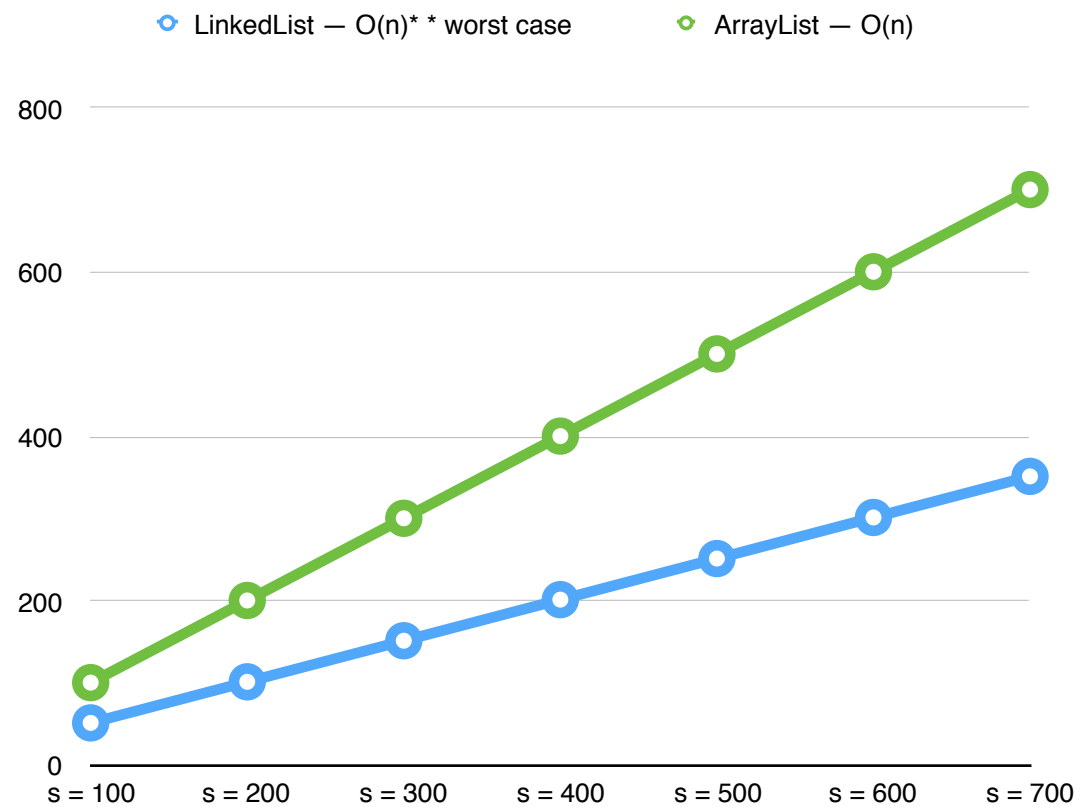
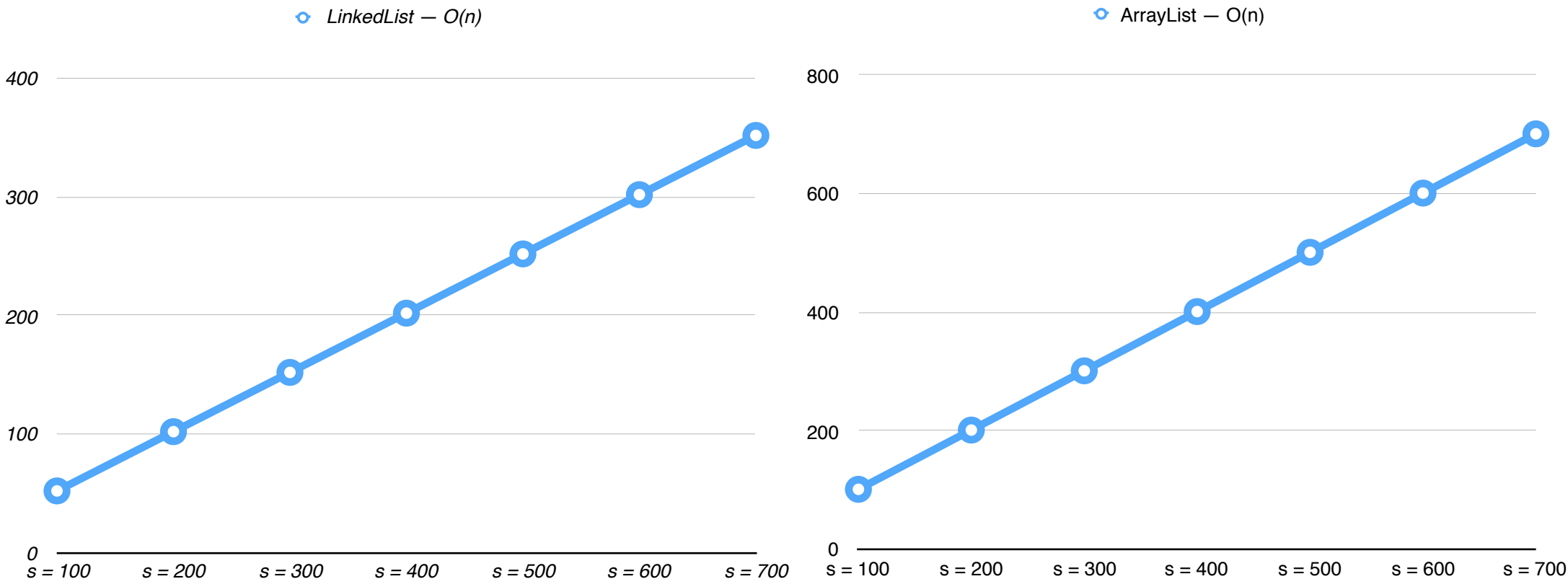


Insert End							
	s = 100	s = 200	s = 300	s = 400	s = 500	s = 600	s = 700
LinkedList — $O(n)$	100	200	300	400	500	600	700
ArrayList — $O(1)$ * * amortized	1	1	1	1	1	1	1



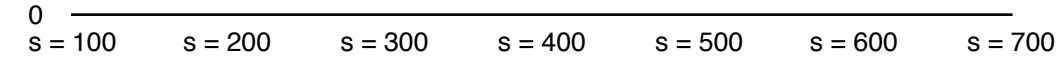
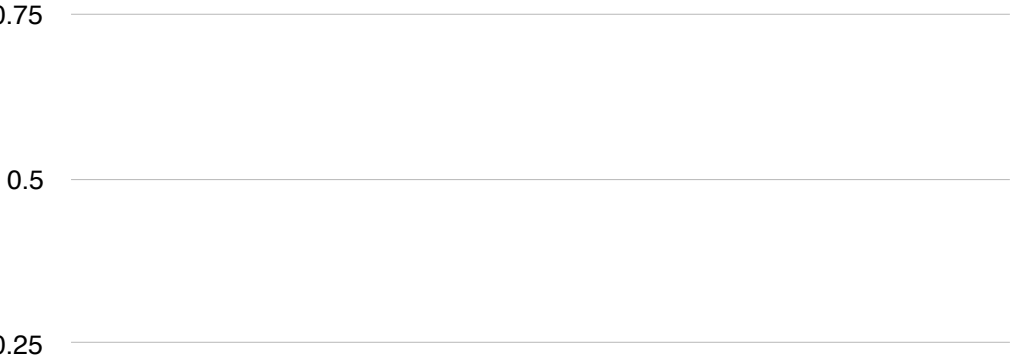
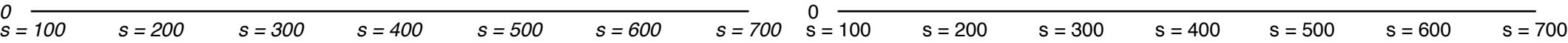
Insert Middle

	s = 100	s = 200	s = 300	s = 400	s = 500	s = 600	s = 700
LinkedList — $O(n)^*$ * worst case	52	102	152	202	252	302	352
ArrayList — $O(n)$	101	201	301	401	501	601	701

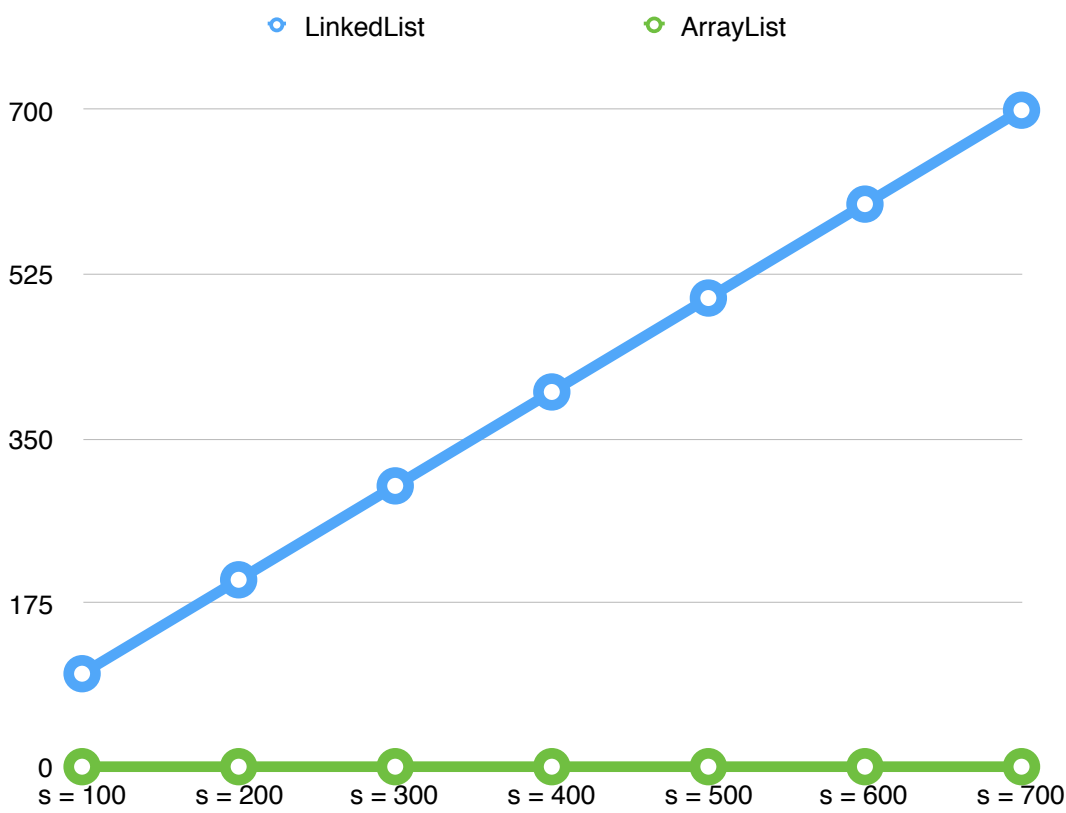
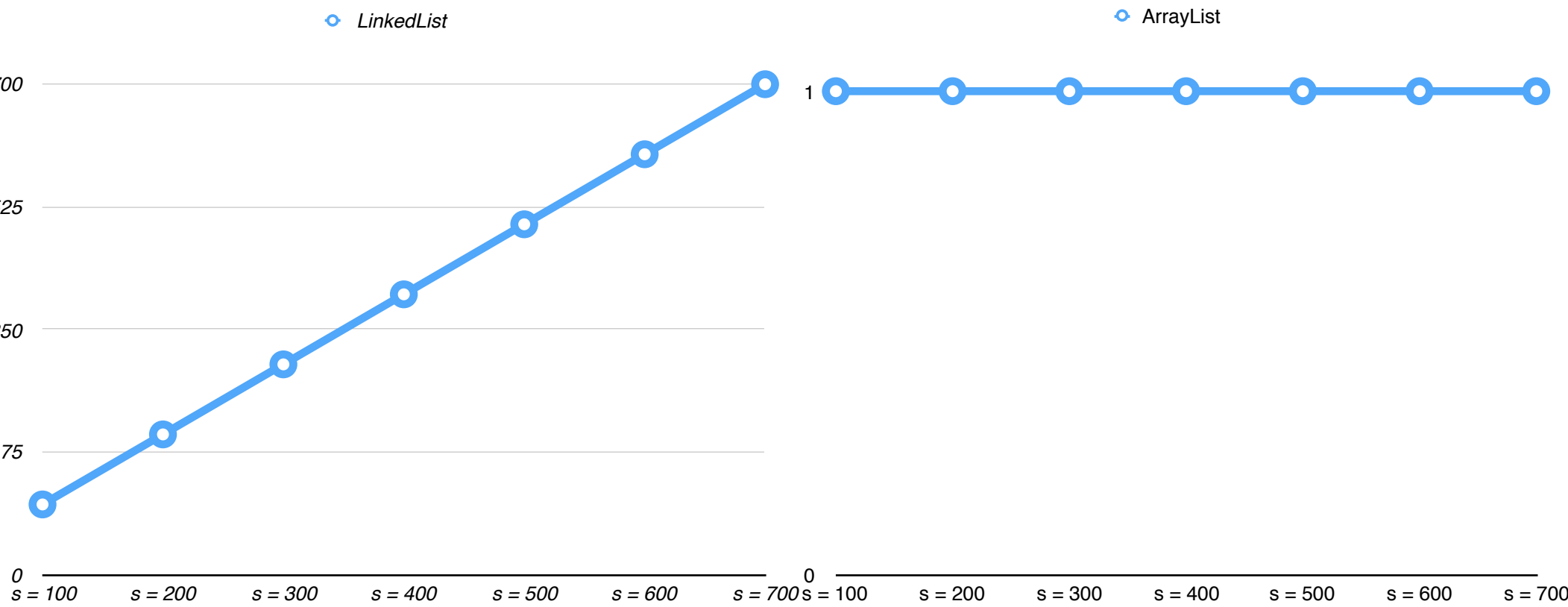


Get First Element

	s = 100	s = 200	s = 300	s = 400	s = 500	s = 600	s = 700
LinkedList — O(1)	1	1	1	1	1	1	1
ArrayList — O(1)	1	1	1	1	1	1	1

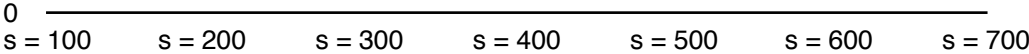
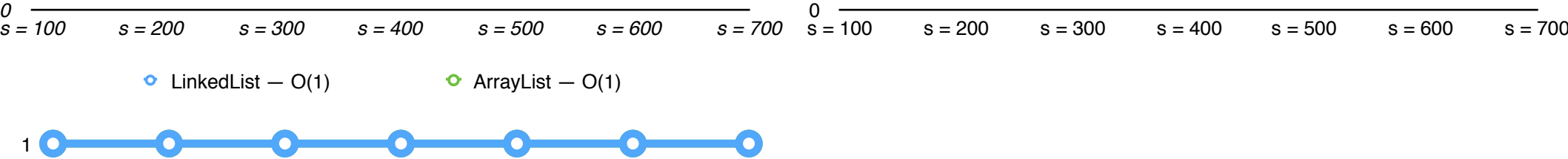


Get Last Element							
	s = 100	s = 200	s = 300	s = 400	s = 500	s = 600	s = 700
LinkedList — $O(n)$	100	200	300	400	500	600	700
ArrayList — $O(1)$	1	1	1	1	1	1	1



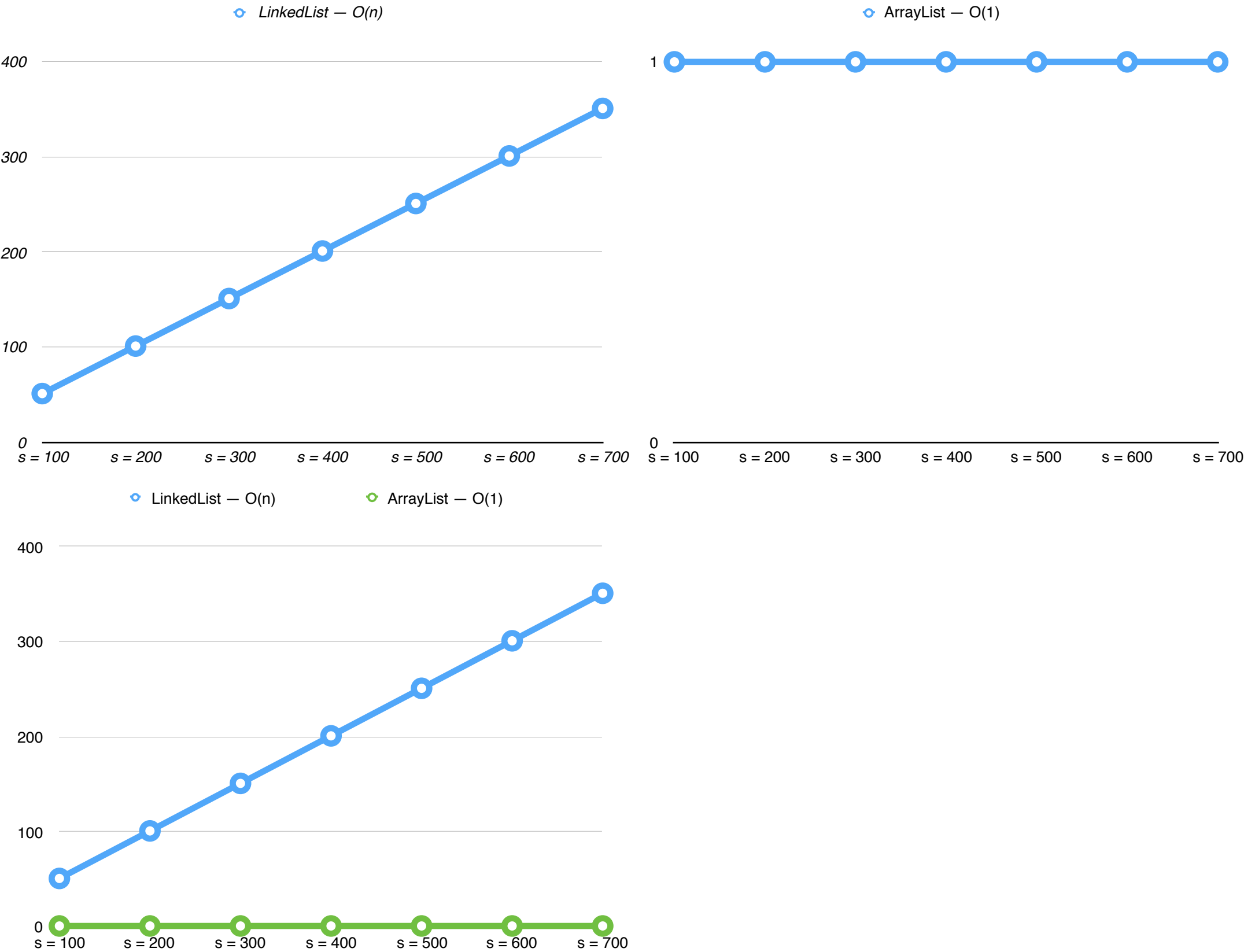
Set First Element

	s = 100	s = 200	s = 300	s = 400	s = 500	s = 600	s = 700
LinkedList — O(1)	1	1	1	1	1	1	1
ArrayList — O(1)	1	1	1	1	1	1	1



Set Middle Element

	s = 100	s = 200	s = 300	s = 400	s = 500	s = 600	s = 700
LinkedList — $O(n)$	51	101	151	201	251	301	351
ArrayList — $O(1)$	1	1	1	1	1	1	1



List Growth																	
	Adding item 1	Adding item 2	Adding item 3	Adding item 4	Adding item 5	Adding item 6	Adding item 7	Adding item 8	Adding item 9	Adding item 10	Adding Item 11	Adding item 16	Adding item 17	Adding item 18	Adding item 19	Adding item 31	Adding item 32
LinkedList — $O(n)$	0	1	2	3	4	5	6	7	8	9	10	15	16	17	18	30	31
ArrayList — $O(1)$ * * amortized	1	1	5	1	9	1	1	1	17	1	1	1	33	1	1	1	1
Note, some columns hidden for display purposes only																	

