

Adstock Rate - Deriving with Analytical Method

Instructions

1. Insert Sales and Advertising
2. Open Solver by going to the Data menu and selecting Solver
If Solver isn't available then load the Add-in.
3. Click Solve

		Advertising	Advertising	Model Results	
		Before Adstock	After Adstock	After Adstock	
	Sales				
1	670,871	0.983	0.983	Adstock Rate	86.23%
2	35,524,494	1.721	2.569	α	31045133.7
3	50,173,057	1.721	3.936	β	981636.6764
4	46,849,336	1.721	5.115	SSE	#####
5	39,246,118	1.512	5.922	Correlation	0.5134
6	21,362	0.256	5.363	R-Squared	0.2636
7	8,831	0.256	4.880		
8	17,987	0.256	4.464		
9	72,788	0.256	4.105		
10	70,691,096	10.505	14.045		
11	98,352,774	14.605	26.716		
12	96,408,086	14.605	37.642		
13	97,663,276	14.605	47.063		
14	72,524,082	16.787	57.370		
15	44,150,510	19.698	69.168		
16	293,596,202	19.698	79.342		
17	52,892,091	19.698	88.114		
18	91,911,501	19.698	95.679		
19	93,892,473	3.302	85.807		
20	120,030,002	3.302	77.294		
21	50,012,648	3.302	69.953		
22	47,577,866	3.302	63.623		
23	66,395,702	10.362	65.225		
24	108,721,179	13.186	69.430		
25	69,263,878	13.186	73.056		
26	154,607,585	13.186	76.182		
27	71,141,134	9.698	75.390		
28	69,654,386	0.977	65.986		
29	62,962,474	0.977	57.877		
30	147,178,533	0.977	50.884		
31	73,797,654	0.977	44.854		
32	76,441,432	2.472	41.150		
33	69,958,251	2.721	38.205		
34	84,762,834	2.721	35.665		
35	89,314,294	2.721	33.475		
36	73,083,886	7.688	36.553		

37	148,786,415	9.674	41.194
38	77,341,625	9.674	45.197
39	70,677,953	9.674	48.648
40	73,150,392	8.525	50.474
41	81,245,287	5.651	49.175
42	69,788,971	5.651	48.055
43	52,650,999	5.651	47.089
44	114,397,752	5.651	46.256
45	74,672,993	7.372	47.259
46	76,415,745	7.372	48.124
47	78,010,767	7.372	48.870
48	150,047,690	7.372	49.513
49	67,177,030	6.482	49.177
50	68,384,498	5.814	48.219
51	70,872,725	5.814	47.394
52	75,167,242	5.814	46.682
53	<u>51,431,436</u>	<u>4.153</u>	44.407