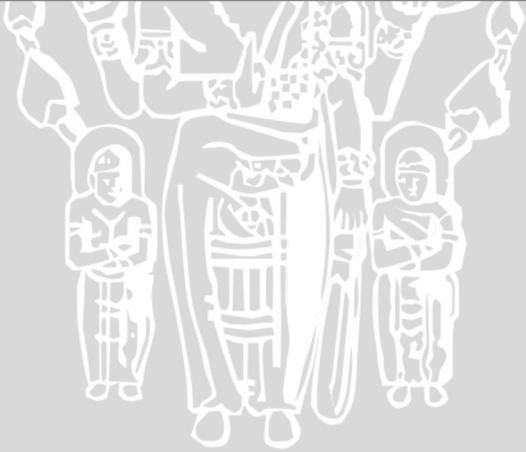
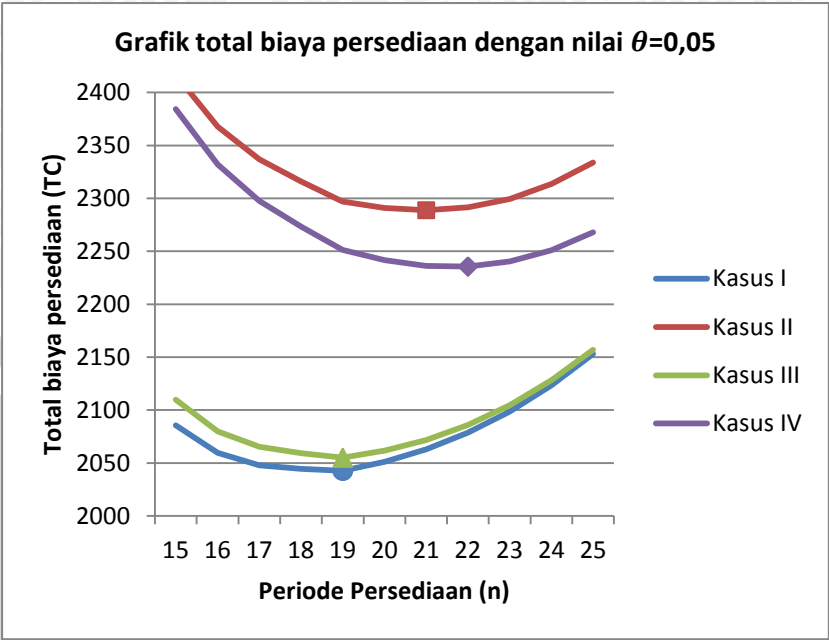


LAMPIRAN

Lampiran 1. Total biaya persediaan dengan nilai $\theta = 0,05$

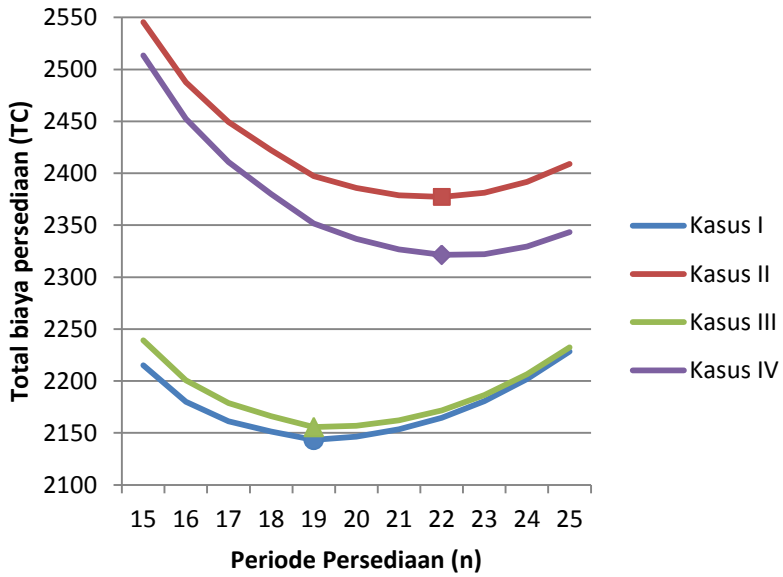
n	T(tahun)	Q (unit)	TC ₁ (\$)	TC ₂ (\$)	TC ₃ (\$)	TC ₄ (\$)
1	5,000	5453,2880	22671,89	27187,27	23780,18	27219,58
2	2,500	2556,4500	10719,93	13134,49	11220,64	13153,09
3	1,667	1668,9060	7052,788	8699,469	7362,820	8711,508
4	1,250	1238,2940	5294,632	6543,525	5511,533	6550,667
5	1,000	984,4051	4281,474	5287,601	4443,542	5290,504
6	0,833	816,5670	3630,226	4471,696	3756,157	4470,674
7	0,714	697,8220	3188,127	3911,288	3288,720	3906,532
8	0,625	609,4734	2875,673	3509,752	2957,628	3501,384
9	0,556	541,2485	2649,113	3213,723	2716,866	3201,825
10	0,500	486,0503	2474,473	2981,372	2530,797	2965,965
11	0,454	440,8244	2341,847	2800,725	2388,946	2781,841
12	0,417	404,5225	2252,342	2673,570	2292,303	2651,297
13	0,385	373,1803	2180,875	2568,505	2214,723	2542,831
14	0,357	345,7971	2124,185	2481,544	2152,768	2452,457
15	0,333	322,3562	2085,486	2416,895	2109,702	2384,423
16	0,312	301,8685	2059,450	2367,906	2079,957	2332,060
17	0,294	284,3247	2047,814	2336,895	2065,276	2297,717
18	0,278	268,7434	2044,359	2316,011	2059,201	2273,509
19	0,263	254,1474	2042,682	2297,110	2055,125	2251,243
20	0,250	241,5063	2051,118	2290,906	2061,591	2241,716
21	0,238	229,8449	2062,896	2288,762	2071,623	2236,236
22	0,227	219,1614	2078,587	2291,435	2085,791	2235,570
23	0,217	209,4542	2098,636	2299,530	2104,534	2240,333
24	0,208	200,7219	2123,391	2313,527	2128,190	2251,014
25	0,200	192,9632	2153,125	2333,815	2157,016	2268,013
26	0,192	185,2076	2180,922	2351,443	2183,962	2282,300
27	0,185	178,4239	2214,158	2375,995	2216,521	2303,552
28	0,178	171,6427	2245,917	2398,493	2247,665	2322,703
29	0,172	165,8321	2283,398	2428,333	2284,681	2349,248
30	0,167	160,9912	2326,666	2465,645	2327,612	2383,328



Lampiran 2. Total biaya persediaan dengan nilai $\theta = 0, 10$

n	T(tahun)	Q (unit)	TC ₁ (\$)	TC ₂ (\$)	TC ₃ (\$)	TC ₄ (\$)
1	5,000	6227,7240	27432,56	31327,80	28640,43	31382,76
2	2,500	2726,6440	12287,10	14567,95	12808,51	14596,06
3	1,667	1741,4380	7937,873	9529,870	8256,053	9547,709
4	1,250	1278,2250	5900,785	7120,979	6121,793	7132,177
5	1,000	1009,6410	4739,555	5728,441	4903,988	5734,394
6	0,833	833,9311	3996,970	4827,192	4124,376	4828,564
7	0,714	710,5031	3493,618	4209,000	3595,186	4206,180
8	0,625	619,1468	3137,445	3765,908	3220,069	3759,140
9	0,556	548,8774	2878,237	3438,658	2946,464	3428,106
10	0,500	492,2025	2677,506	3181,223	2734,171	3166,955
11	0,454	445,8850	2523,871	2980,289	2571,218	2962,377
12	0,417	408,7839	2418,316	2837,588	2458,462	2816,157
13	0,385	376,8070	2332,911	2718,976	2366,898	2694,033
14	0,357	348,9110	2263,975	2620,077	2292,662	2591,624
15	0,333	325,0622	2215,013	2545,399	2239,306	2513,480
16	0,312	304,2415	2180,092	2487,711	2200,659	2452,349
17	0,294	286,4299	2161,118	2449,503	2178,624	2410,751
18	0,278	270,6242	2151,192	2422,264	2166,069	2380,137
19	0,263	255,8294	2143,229	2397,175	2155,698	2351,638
20	0,250	243,0252	2146,441	2385,825	2156,934	2336,924
21	0,238	231,2206	2153,336	2378,862	2162,077	2326,590
22	0,227	220,4122	2164,541	2377,104	2171,756	2321,462
23	0,217	210,5967	2180,550	2381,204	2186,457	2322,202
24	0,208	201,7711	2201,748	2391,681	2206,554	2329,340
25	0,200	193,9329	2228,441	2408,957	2232,336	2343,306
26	0,192	186,1009	2252,968	2423,342	2256,011	2354,330
27	0,185	179,2530	2283,500	2445,213	2285,865	2372,883
28	0,178	172,4099	2312,375	2464,847	2314,124	2389,154
29	0,172	166,5482	2347,574	2492,420	2348,858	2413,420
30	0,167	161,6662	2389,176	2528,078	2390,122	2445,835

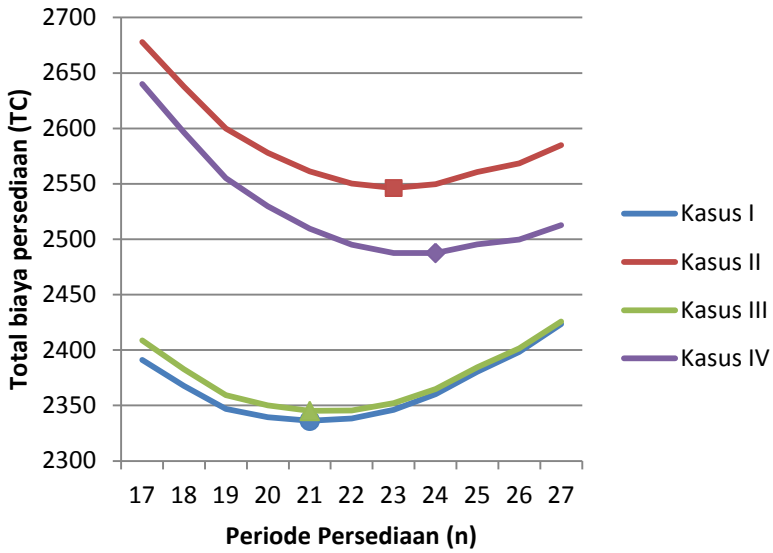
Grafik total biaya persediaan dengan nilai $\theta=0,10$



Lampiran 3. Total biaya persediaan dengan nilai $\theta = 0,20$

n	T(tahun)	Q (unit)	TC ₁ (\$)	TC ₂ (\$)	TC ₃ (\$)	TC ₄ (\$)
1	5,000	8247,7530	39445,50	41830,17	40895,35	41943,86
2	2,500	3113,8620	15812,69	17799,87	16379,46	17849,49
3	1,667	1899,3860	9854,299	11330,08	10189,75	11360,48
4	1,250	1363,3220	7188,106	8348,292	7417,683	8368,086
5	1,000	1062,7330	5701,080	6654,263	5870,401	6666,596
6	0,833	870,1520	4760,732	5567,810	4891,168	5574,147
7	0,714	736,7956	4126,233	4825,678	4229,791	4826,851
8	0,625	639,1126	3677,226	4294,224	3761,213	4290,742
9	0,556	564,5684	3349,135	3901,029	3418,325	3893,228
10	0,500	504,8204	3093,659	3590,911	3151,014	3578,966
11	0,454	456,2399	2896,136	3347,563	2943,985	3331,629
12	0,417	417,4873	2757,147	3172,458	2797,668	3152,739
13	0,385	384,2020	2642,808	3025,709	2677,075	3002,248
14	0,357	355,2516	2548,523	2902,085	2577,419	2874,915
15	0,333	330,5657	2478,360	2806,683	2502,811	2775,882
16	0,312	309,0625	2425,128	2731,058	2445,813	2696,672
17	0,294	290,7029	2391,044	2678,027	2408,641	2640,134
18	0,278	274,4387	2367,821	2637,722	2382,766	2596,352
19	0,263	259,2382	2346,962	2599,937	2359,482	2555,062
20	0,250	246,1013	2339,465	2578,033	2349,996	2529,716
21	0,238	234,0051	2336,362	2561,204	2345,132	2509,444
22	0,227	222,9425	2338,396	2550,386	2345,632	2495,191
23	0,217	212,9067	2346,153	2546,324	2352,074	2487,713
24	0,208	203,8915	2360,091	2549,615	2364,907	2487,616
25	0,200	195,8917	2380,576	2560,743	2384,480	2495,395
26	0,192	187,9047	2398,441	2568,522	2401,489	2499,771
27	0,185	180,9265	2423,465	2584,929	2425,834	2512,827
28	0,178	173,9581	2446,473	2598,736	2448,224	2523,238
29	0,172	167,9929	2477,029	2621,697	2478,314	2542,866
30	0,167	163,0274	2515,239	2653,986	2516,185	2571,892

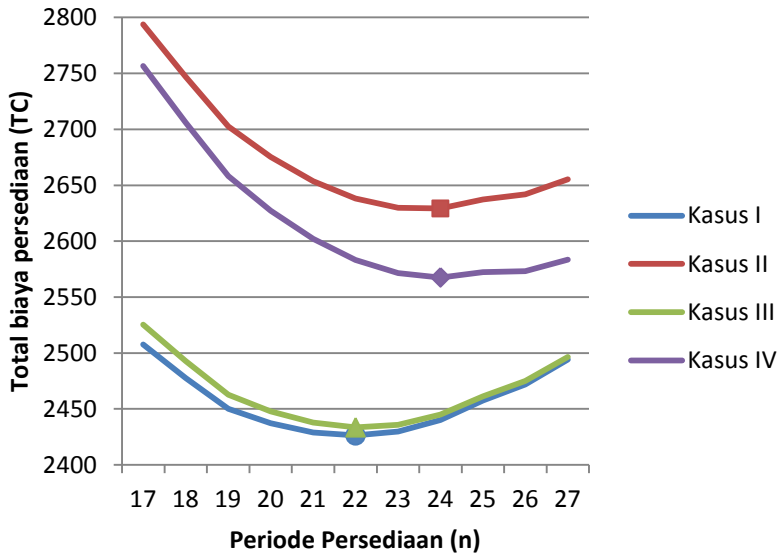
Grafik total biaya persediaan dengan nilai $\theta=0,20$



Lampiran 4. Total biaya persediaan dengan nilai $\theta = 0,25$

n	T(tahun)	Q (unit)	TC ₁ (\$)	TC ₂ (\$)	TC ₃ (\$)	TC ₄ (\$)
1	5,000	9562,9170	47031,73	48495,02	48628,81	48646,70
2	2,500	3334,0640	17796,08	19621,93	18387,71	19683,71
3	1,667	1985,3690	10891,79	12305,82	11236,41	12343,02
4	1,250	1408,6580	7871,631	9000,445	8105,677	9024,792
5	1,000	1090,6580	6205,663	7140,360	6377,508	7156,030
6	0,833	889,0407	5158,382	5953,554	5290,374	5962,465
7	0,714	750,4239	4453,742	5145,027	4558,318	5148,257
8	0,625	649,4148	3955,488	4566,636	4040,170	4564,839
9	0,556	572,6365	3591,086	4138,639	3660,764	4132,245
10	0,500	511,2901	3306,905	3800,873	3364,610	3790,113
11	0,454	461,5369	3086,470	3535,366	3134,573	3520,438
12	0,417	421,9311	2930,077	3343,382	2970,787	3324,532
13	0,385	387,9717	2800,725	3182,025	2835,134	3159,316
14	0,357	358,4792	2693,325	3045,604	2722,327	3019,084
15	0,333	333,3638	2612,217	2939,499	2636,747	2909,263
16	0,312	311,5110	2549,550	2854,628	2570,295	2820,736
17	0,294	292,8712	2507,691	2793,968	2525,334	2756,509
18	0,278	276,3727	2477,635	2746,947	2492,616	2705,959
19	0,263	260,9652	2450,163	2702,650	2462,709	2658,108
20	0,250	247,6587	2437,180	2675,338	2447,731	2627,314
21	0,238	235,4141	2428,961	2653,460	2437,746	2601,957
22	0,227	224,2221	2426,308	2638,009	2433,554	2583,040
23	0,217	214,0743	2429,851	2629,779	2435,780	2571,365
24	0,208	204,9629	2440,084	2629,402	2444,905	2567,576
25	0,200	196,8810	2457,403	2637,395	2461,311	2572,198
26	0,192	188,8153	2471,875	2641,808	2474,925	2573,189
27	0,185	181,7711	2494,094	2655,433	2496,465	2583,445
28	0,178	174,7391	2514,118	2666,276	2515,870	2590,876
29	0,172	168,7215	2542,312	2686,891	2543,598	2608,145
30	0,167	163,7137	2578,796	2717,465	2579,743	2635,447

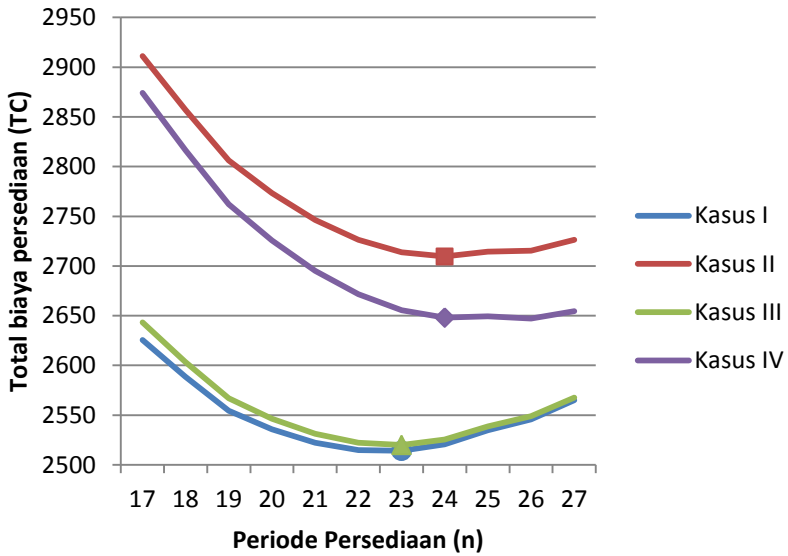
Grafik total biaya persediaan dengan nilai $\theta=0,25$



Lampiran 5. Total biaya persediaan dengan nilai $\theta = 0,30$

n	T(tahun)	Q (unit)	TC ₁ (\$)	TC ₂ (\$)	TC ₃ (\$)	TC ₄ (\$)
1	5,000	11141,410	55954,35	56360,01	57720,13	56557,10
2	2,500	3574,4000	19945,33	21599,17	20563,43	21674,17
3	1,667	2076,4360	11986,60	13336,27	12340,74	13380,64
4	1,250	1455,9730	8583,403	9679,889	8822,048	9708,969
5	1,000	1119,5480	6726,923	7642,695	6901,349	7661,805
6	0,833	908,4705	5566,983	6350,019	5700,558	6361,568
7	0,714	764,3853	4788,987	5471,980	4894,595	5477,310
8	0,625	659,9368	4239,507	4844,723	4324,891	4844,642
9	0,556	580,8574	3837,491	4380,652	3907,664	4375,686
10	0,500	517,8696	3523,684	4014,334	3581,743	4004,774
11	0,454	466,9154	3279,668	3726,010	3328,027	3712,100
12	0,417	426,4377	3105,398	3516,680	3146,299	3498,708
13	0,385	391,7904	2960,659	3340,347	2995,210	3318,396
14	0,357	361,7458	2839,843	3190,830	2868,951	3164,966
15	0,333	336,1933	2747,554	3073,788	2772,164	3044,122
16	0,312	313,9853	2675,261	2979,483	2696,066	2946,087
17	0,294	295,0609	2625,477	2911,044	2643,166	2874,021
18	0,278	278,3248	2588,465	2857,184	2603,480	2816,580
19	0,263	262,7075	2554,267	2806,263	2566,839	2762,057
20	0,250	249,2293	2535,707	2773,453	2546,277	2725,725
21	0,238	236,8344	2522,293	2746,447	2531,092	2695,203
22	0,227	225,5115	2514,884	2726,295	2522,140	2671,552
23	0,217	215,2504	2514,152	2713,837	2520,089	2655,621
24	0,208	206,0416	2520,630	2709,743	2525,457	2648,090
25	0,200	197,8769	2534,742	2714,558	2538,653	2649,513
26	0,192	189,7318	2545,777	2715,563	2548,830	2647,076
27	0,185	182,6209	2565,157	2726,371	2567,530	2654,498
28	0,178	175,5248	2582,163	2734,216	2583,916	2658,915
29	0,172	169,4543	2607,969	2752,459	2609,256	2673,798
30	0,167	164,4039	2642,706	2781,298	2643,654	2699,355

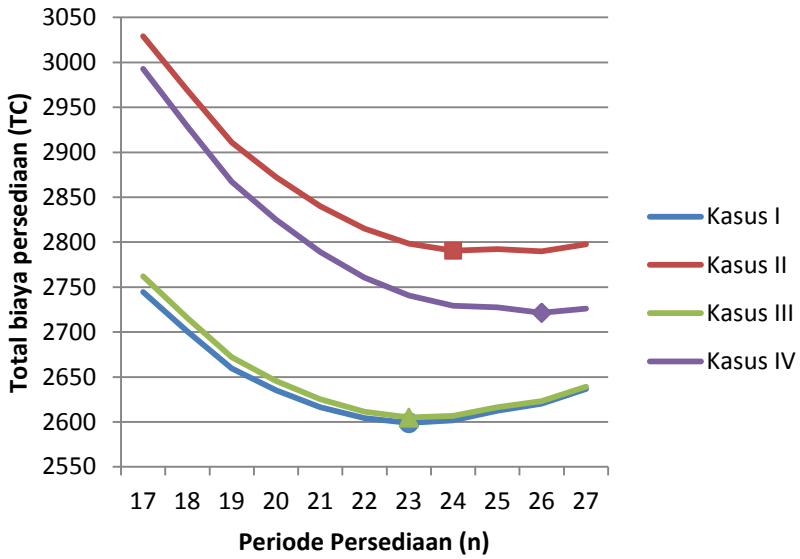
Grafik total biaya persediaan dengan nilai $\theta=0,30$



Lampiran 6. Total biaya persediaan dengan nilai $\theta = 0,35$

n	T(tahun)	Q (unit)	TC ₁ (\$)	TC ₂ (\$)	TC ₃ (\$)	TC ₄ (\$)
1	5,000	13041,2000	66483,66	65671,77	68443,30	65923,26
2	2,500	3836,9150	22276,36	23746,67	22922,65	23836,05
3	1,667	2172,9210	13142,32	14424,93	13506,39	14476,85
4	1,250	1505,3630	9324,755	10387,92	9568,133	10421,92
5	1,000	1149,4420	7265,487	8161,885	7442,552	8184,539
6	0,833	928,4587	5986,879	6757,544	6122,065	6771,797
7	0,714	778,6890	5132,175	5806,741	5238,830	5814,214
8	0,625	670,6837	4529,417	5128,619	4615,513	5130,283
9	0,556	589,2342	4088,445	4627,160	4159,117	4623,643
10	0,500	524,5611	3744,063	4231,359	3802,477	4223,015
11	0,454	472,3768	3475,780	3919,544	3524,397	3906,663
12	0,417	431,0080	3283,148	3692,390	3324,241	3675,305
13	0,385	395,6590	3122,640	3500,702	3157,334	3479,516
14	0,357	365,0518	2988,100	3337,786	3017,315	3312,582
15	0,333	339,0547	2884,390	3209,569	2909,080	3180,476
16	0,312	316,4857	2802,277	3105,637	2823,142	3072,741
17	0,294	297,2724	2744,416	3029,268	2762,150	2992,684
18	0,278	280,2953	2700,319	2968,443	2715,369	2928,226
19	0,263	264,4653	2659,282	2910,785	2671,880	2866,916
20	0,250	250,8131	2635,054	2872,387	2645,643	2824,954
21	0,238	238,2660	2616,365	2840,172	2625,178	2789,187
22	0,227	226,8108	2604,129	2815,250	2611,396	2760,733
23	0,217	216,4351	2599,063	2798,504	2605,008	2740,486
24	0,208	207,1280	2601,734	2790,641	2606,567	2729,161
25	0,200	198,8796	2612,595	2792,235	2616,510	2727,343
26	0,192	190,6542	2620,153	2789,790	2623,208	2721,435
27	0,185	183,4759	2636,659	2797,746	2639,033	2725,989
28	0,178	176,3152	2650,612	2802,559	2652,366	2727,357
29	0,172	170,1914	2674,002	2818,402	2675,290	2739,827
30	0,167	165,0980	2706,972	2845,486	2707,920	2763,618

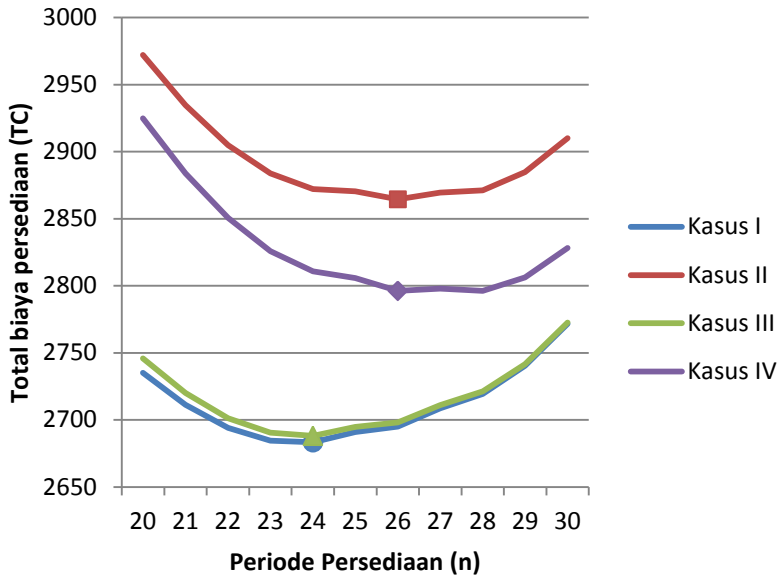
Grafik total biaya persediaan dengan nilai $\theta=0,35$



Lampiran 7. Total biaya persediaan dengan nilai $\theta = 0,40$

n	T(tahun)	Q (unit)	TC ₁ (\$)	TC ₂ (\$)	TC ₃ (\$)	TC ₄ (\$)
1	5,000	15333,730	78949,04	76731,48	81132,07	77048,32
2	2,500	4123,8760	24806,73	26081,10	25483,08	26186,13
3	1,667	2275,1850	14362,85	15575,51	14737,24	15635,43
4	1,250	1556,9310	10097,09	11125,91	10345,34	11165,03
5	1,000	1180,3790	7822,011	8698,569	8001,773	8724,877
6	0,833	949,0233	6418,425	7176,478	6555,251	7193,502
7	0,714	793,3443	5483,520	6149,522	5591,237	6159,182
8	0,625	681,6610	4825,357	5418,462	4912,173	5421,902
9	0,556	597,7702	4344,042	4878,258	4415,219	4876,212
10	0,500	531,3666	3968,108	4452,015	4026,882	4444,903
11	0,454	477,9227	3674,855	4116,016	3723,732	4104,177
12	0,417	435,6431	3463,365	3870,550	3504,652	3854,362
13	0,385	399,5781	3286,696	3663,121	3321,535	3642,708
14	0,357	368,3978	3138,119	3486,495	3167,441	3461,957
15	0,333	341,9483	3022,743	3346,860	3047,513	3318,346
16	0,312	319,0124	2930,612	3233,105	2951,538	3200,713
17	0,294	299,5058	2864,519	3148,653	2882,299	3112,511
18	0,278	282,2842	2813,209	3080,735	2828,294	3040,906
19	0,263	266,2387	2765,217	3016,225	2777,841	2972,694
20	0,250	252,4102	2735,228	2972,145	2745,837	2925,011
21	0,238	239,7091	2711,182	2934,642	2720,010	2883,918
22	0,227	228,1199	2694,049	2904,878	2701,326	2850,590
23	0,217	217,6285	2684,588	2883,784	2690,540	2825,965
24	0,208	208,2219	2683,401	2872,100	2688,239	2810,795
25	0,200	199,8890	2690,967	2870,430	2694,887	2805,692
26	0,192	191,5826	2695,004	2864,493	2698,062	2796,270
27	0,185	184,3363	2708,602	2869,563	2710,978	2797,921
28	0,178	177,1103	2719,467	2871,309	2721,222	2796,205
29	0,172	170,9327	2740,414	2884,724	2741,702	2806,235
30	0,167	165,7959	2771,596	2910,032	2772,544	2828,239

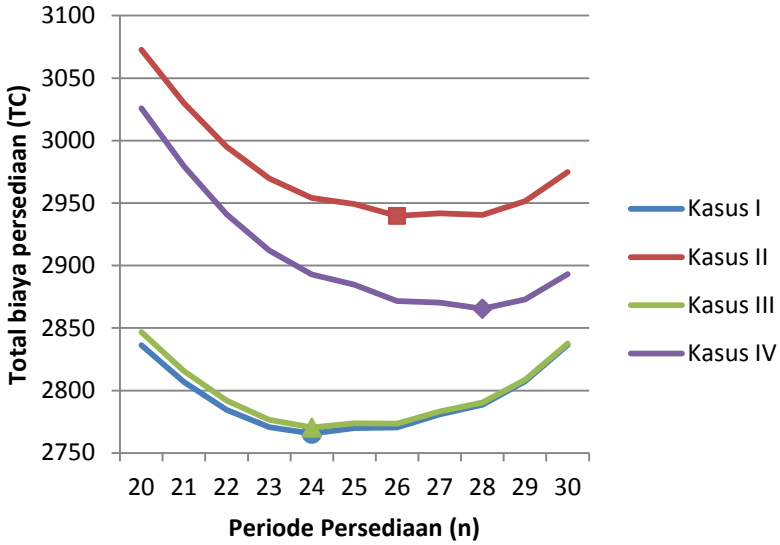
Grafik total biaya persediaan dengan nilai $\theta=0,40$



Lampiran 8. Total biaya persediaan dengan nilai $\theta = 0,45$

n	T(tahun)	Q (unit)	TC ₁ (\$)	TC ₂ (\$)	TC ₃ (\$)	TC ₄ (\$)
1	5,000	18107,170	93752,51	89907,51	96193,67	90303,05
2	2,500	4437,7960	27555,85	28620,85	28264,25	28742,93
3	1,667	2383,6110	15652,31	16792,02	16037,45	16860,37
4	1,250	1610,7830	10901,87	11895,28	11155,13	11939,72
5	1,000	1212,3990	8397,172	9253,413	8579,693	9283,489
6	0,833	970,1828	6861,986	7607,183	7000,482	7627,047
7	0,714	808,3609	5843,240	6500,539	5952,036	6512,432
8	0,625	692,8742	5127,470	5714,392	5215,015	5719,639
9	0,556	606,4688	4604,379	5134,041	4676,066	5133,489
10	0,500	538,2885	4195,889	4676,371	4255,026	4670,507
11	0,454	483,5543	3876,943	4315,477	3926,083	4304,692
12	0,417	440,3439	3646,088	4051,199	3687,570	4035,916
13	0,385	403,5485	3452,858	3827,633	3487,842	3808,000
14	0,357	371,7843	3289,924	3636,981	3319,353	3613,115
15	0,333	344,8746	3162,632	3485,681	3187,483	3457,75
16	0,312	321,5659	3060,283	3361,904	3081,269	3330,018
17	0,294	301,7615	2985,799	3269,212	3003,625	3233,514
18	0,278	284,2918	2927,146	3194,071	2942,266	3154,632
19	0,263	268,0278	2872,081	3122,592	2884,731	3079,402
20	0,250	254,0208	2836,237	3072,738	2846,866	3025,903
21	0,238	241,1638	2806,752	3029,863	2815,595	2979,401
22	0,227	229,4391	2784,649	2995,186	2791,938	2941,127
23	0,217	218,8305	2770,732	2969,682	2776,692	2912,063
24	0,208	209,3235	2765,634	2954,125	2770,477	2892,995
25	0,200	200,9051	2769,862	2949,148	2773,786	2884,563
26	0,192	192,5170	2770,334	2939,675	2773,395	2871,585
27	0,185	185,2021	2780,988	2941,823	2783,366	2870,297
28	0,178	177,9102	2788,731	2940,467	2790,487	2865,462
29	0,172	171,6782	2807,207	2951,427	2808,496	2873,024
30	0,167	166,4978	2836,579	2974,937	2837,528	2893,220

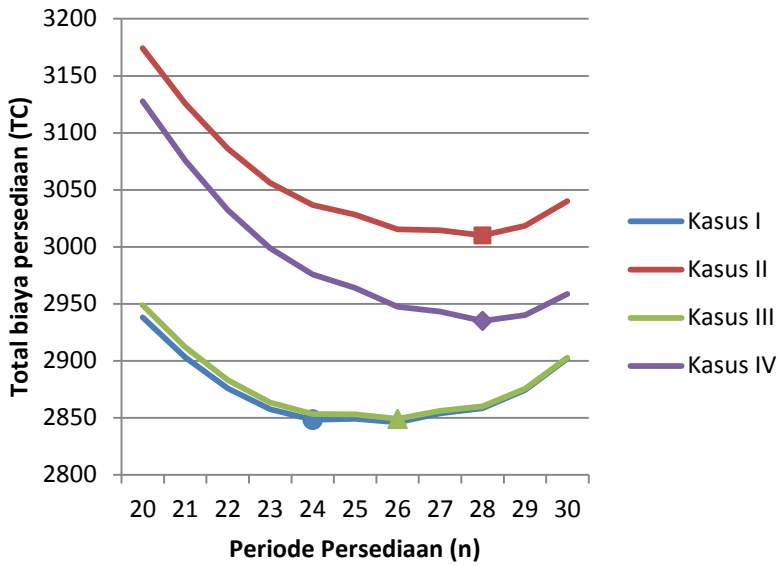
Grafik total biaya persediaan dengan nilai $\theta=0,45$



Lampiran 9. Total biaya persediaan dengan nilai $\theta = 0,50$

n	T(tahun)	Q (unit)	TC ₁ (\$)	TC ₂ (\$)	TC ₃ (\$)	TC ₄ (\$)
1	5,000	21470,390	111385,50	105651,1	114125,7	106141,6
2	2,500	4781,4580	30545,140	31386,27	31287,74	31526,93
3	1,667	2498,6100	17015,110	18078,72	17411,45	18155,98
4	1,250	1667,0320	11740,650	12697,54	11999,08	12747,53
5	1,000	1245,5450	8991,679	9827,113	9177,020	9861,073
6	0,833	991,9565	7317,942	8050,030	7458,137	8072,805
7	0,714	823,7489	6211,563	6860,016	6321,453	6874,189
8	0,625	704,3288	5435,900	6016,553	5524,183	6023,639
9	0,556	615,3335	4869,556	5394,608	4941,758	5395,574
10	0,500	545,3288	4427,477	4904,496	4486,980	4899,897
11	0,454	489,2733	4082,097	4517,979	4131,501	4508,260
12	0,417	445,1115	3831,356	4234,375	3873,034	4220,007
13	0,385	407,5709	3621,157	3994,269	3656,287	3975,423
14	0,357	375,2119	3443,538	3789,267	3473,076	3766,078
15	0,333	347,8340	3304,076	3626,051	3329,009	3598,706
16	0,312	324,1463	3191,304	3492,049	3212,351	3460,673
17	0,294	304,0396	3108,270	3390,957	3126,143	3355,707
18	0,278	286,3183	3042,140	3308,461	3057,295	3269,415
19	0,263	269,8328	2979,883	3229,894	2992,560	3187,047
20	0,250	255,6450	2938,090	3174,172	2948,738	3127,637
21	0,238	242,6302	2903,082	3125,841	2911,939	3075,643
22	0,227	230,7684	2875,937	3086,180	2883,236	3032,350
23	0,217	220,0414	2857,500	3056,203	2863,468	2998,785
24	0,208	210,4329	2848,438	3036,720	2853,287	2975,766
25	0,200	201,9282	2849,284	3028,392	2853,212	2963,961
26	0,192	193,4574	2846,148	3015,339	2849,211	2947,382
27	0,185	186,0732	2853,822	3014,530	2856,202	2943,119
28	0,178	178,7149	2858,406	3010,036	2860,164	2935,131
29	0,172	172,4282	2874,383	3018,514	2875,673	2940,196
30	0,167	167,2036	2901,925	3040,205	2902,874	2958,563

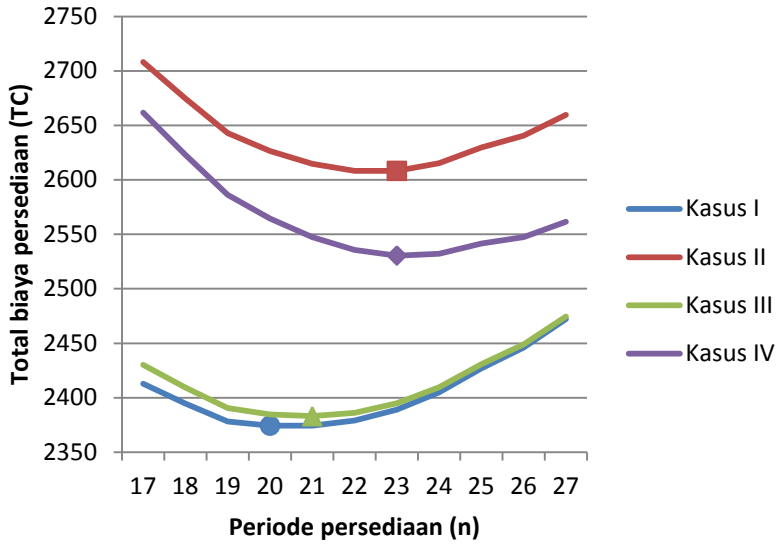
Grafik total biaya persediaan dengan nilai $\theta=0,50$



Lampiran 10. Total biaya persediaan dengan nilai $M = 0,02$

n	T(tahun)	Q (unit)	TC ₁ (\$)	TC ₂ (\$)	TC ₃ (\$)	TC ₄ (\$)
1	5,000	7148,800	33213,09	36308,32	34534,08	36484,62
2	2,500	2911,945	14173,98	16264,49	14717,38	16351,02
3	1,667	1818,174	9049,830	10550,97	9376,478	10608,85
4	1,250	1319,874	6703,088	7867,347	6928,320	7909,137
5	1,000	1035,739	5379,022	6328,965	5545,872	6359,359
6	0,833	851,7875	4536,183	5337,556	4665,092	5358,767
7	0,714	723,4915	3965,501	4658,828	4068,057	4672,134
8	0,625	629,0249	3561,069	4172,509	3644,370	4178,700
9	0,556	556,6497	3265,600	3813,000	3334,306	3812,596
10	0,500	498,4586	3035,405	3529,534	3092,414	3522,792
11	0,454	451,0230	2857,681	3307,531	2905,278	3294,686
12	0,417	413,1052	2733,825	3149,140	2774,158	3130,546
13	0,385	380,4806	2632,086	3016,666	2666,213	2992,369
14	0,357	352,0623	2548,359	2905,344	2577,150	2875,381
15	0,333	327,7986	2486,833	2820,329	2511,205	2784,829
16	0,312	306,6394	2440,812	2753,677	2461,437	2712,713
17	0,294	288,5559	2412,654	2708,303	2430,206	2662,016
18	0,278	272,5226	2394,464	2674,765	2409,375	2623,203
19	0,263	257,5263	2378,014	2643,180	2390,509	2586,268
20	0,250	244,5568	2374,178	2626,683	2384,690	2564,545
21	0,238	232,6073	2374,222	2614,768	2382,978	2547,390
22	0,227	221,6726	2378,932	2608,397	2386,157	2535,790
23	0,217	211,7475	2388,947	2608,358	2394,860	2530,553
24	0,208	202,8277	2404,786	2615,296	2409,597	2532,344
25	0,200	194,9090	2426,885	2629,751	2430,785	2541,727
26	0,192	186,9999	2446,065	2640,621	2449,110	2547,411
27	0,185	180,0872	2472,197	2659,864	2474,564	2561,569
28	0,178	173,1817	2496,033	2676,281	2497,783	2572,805
29	0,172	167,2685	2527,306	2701,678	2528,591	2593,148
30	0,167	162,3449	2566,208	2736,300	2567,154	2622,864

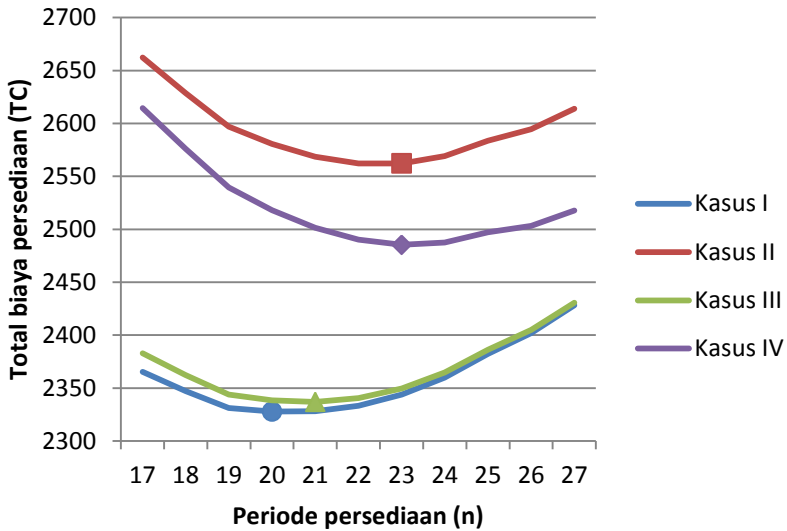
Grafik total biaya persediaan dengan nilai $M=0,02$



Lampiran 11. Total biaya persediaan dengan nilai $M = 0,04$

n	T(tahun)	Q (unit)	TC ₁ (\$)	TC ₂ (\$)	TC ₃ (\$)	TC ₄ (\$)
1	5,000	7148,800	33136,54	36262,24	34457,53	36408,07
2	2,500	2911,945	14111,98	16218,41	14655,38	16289,03
3	1,667	1818,174	8992,116	10504,88	9318,765	10551,14
4	1,250	1319,874	6647,567	7821,267	6872,799	7853,615
5	1,000	1035,739	5324,894	6282,885	5491,745	6305,232
6	0,833	851,7875	4483,097	5291,494	4612,005	5305,681
7	0,714	723,4915	3913,223	4612,766	4015,779	4619,856
8	0,625	629,0249	3509,448	4126,429	3592,749	4127,078
9	0,556	556,6497	3214,530	3766,883	3283,236	3761,526
10	0,500	498,4586	2984,916	3483,454	3041,925	3472,304
11	0,454	451,0230	2807,754	3261,506	2855,351	3244,759
12	0,417	413,1052	2684,251	3103,023	2724,584	3080,971
13	0,385	380,4806	2582,940	2970,540	2617,067	2943,224
14	0,357	352,0623	2499,710	2859,283	2528,501	2826,733
15	0,333	327,7986	2438,623	2774,295	2462,995	2736,619
16	0,312	306,6394	2393,028	2707,671	2413,653	2664,929
17	0,294	288,5559	2365,188	2662,242	2382,740	2614,551
18	0,278	272,5226	2347,309	2628,648	2362,221	2576,048
19	0,263	257,5263	2331,303	2597,128	2343,798	2539,557
20	0,250	244,5568	2327,797	2580,603	2338,309	2518,164
21	0,238	232,6073	2328,220	2568,706	2336,976	2501,388
22	0,227	221,6726	2333,326	2562,372	2340,551	2490,184
23	0,217	211,7475	2343,722	2562,361	2349,636	2485,328
24	0,208	202,8277	2359,897	2569,289	2364,707	2487,455
25	0,200	194,9090	2382,254	2583,671	2386,153	2497,096
26	0,192	186,9999	2401,860	2594,615	2404,905	2503,206
27	0,185	180,0872	2428,298	2613,830	2430,665	2517,670
28	0,178	173,1817	2452,587	2630,349	2454,337	2529,359
29	0,172	167,2685	2484,152	2655,709	2485,437	2549,993
30	0,167	162,3449	2523,154	2690,128	2524,100	2579,810

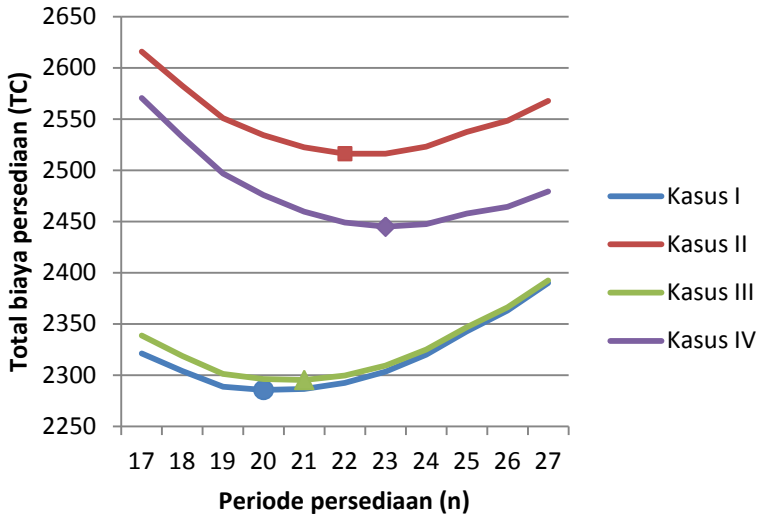
Grafik total biaya persediaan dengan nilai $M=0,04$



Lampiran 12. Total biaya persediaan dengan nilai $M = 0,06$

n	T(tahun)	Q (unit)	TC ₁ (\$)	TC ₂ (\$)	TC ₃ (\$)	TC ₄ (\$)
1	5,000	7148,800	33060,43	36216,16	34381,42	36331,96
2	2,500	2911,945	14050,59	16172,33	14593,99	16227,63
3	1,667	1818,174	8935,197	10458,79	9261,845	10494,22
4	1,250	1319,874	6593,040	7775,187	6818,272	7799,088
5	1,000	1035,739	5271,964	6236,805	5438,815	6252,302
6	0,833	851,7875	4431,412	5245,433	4560,321	5253,996
7	0,714	723,4915	3862,551	4566,705	3965,106	4569,184
8	0,625	629,0249	3459,637	4080,349	3542,939	4077,268
9	0,556	556,6497	3165,476	3720,766	3234,181	3712,472
10	0,500	498,4586	2936,649	3437,374	2993,658	3424,037
11	0,454	451,0230	2760,253	3215,481	2807,850	3197,258
12	0,417	413,1052	2637,310	3056,906	2677,643	3034,030
13	0,385	380,4806	2536,634	2924,414	2570,760	2896,917
14	0,357	352,0623	2454,106	2813,221	2482,897	2781,129
15	0,333	327,7986	2393,663	2728,261	2418,035	2691,659
16	0,312	306,6394	2348,699	2661,664	2369,325	2620,600
17	0,294	288,5559	2321,385	2616,180	2338,937	2570,747
18	0,278	272,5226	2304,023	2582,532	2318,934	2532,761
19	0,263	257,5263	2288,666	2551,075	2301,160	2496,920
20	0,250	244,5568	2285,696	2534,523	2296,208	2476,063
21	0,238	232,6073	2286,704	2522,645	2295,460	2459,872
22	0,227	221,6726	2292,412	2516,348	2299,637	2449,270
23	0,217	211,7475	2303,395	2516,364	2309,309	2445,001
24	0,208	202,8277	2320,111	2523,283	2324,922	2447,669
25	0,200	194,9090	2342,932	2537,591	2346,832	2457,774
26	0,192	186,9999	2363,170	2548,608	2366,215	2464,516
27	0,185	180,0872	2390,120	2567,796	2392,488	2479,493
28	0,178	173,1817	2415,068	2584,416	2416,818	2491,840
29	0,172	167,2685	2447,131	2609,739	2448,416	2512,973
30	0,167	162,3449	2486,440	2643,956	2487,386	2543,096

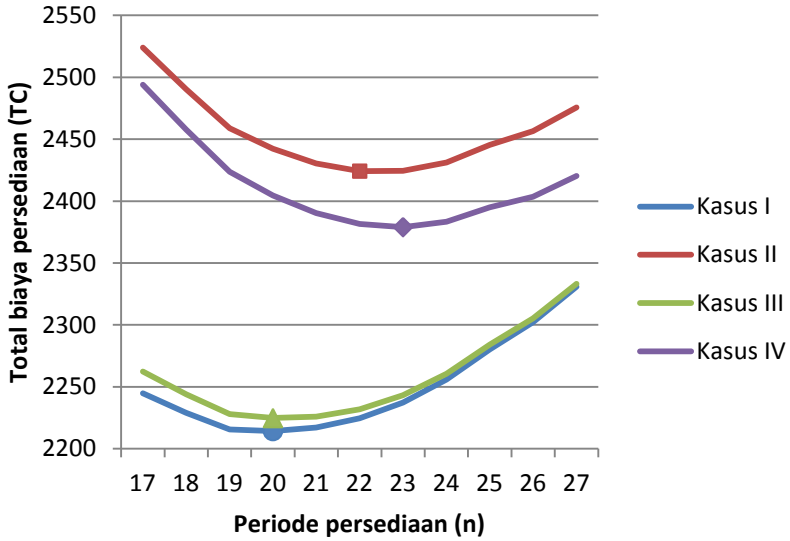
Grafik total biaya persediaan dengan nilai $M=0,06$



Lampiran 13. Total biaya persediaan dengan nilai $M = 0, 10$

n	T(tahun)	Q (unit)	TC ₁ (\$)	TC ₂ (\$)	TC ₃ (\$)	TC ₄ (\$)
1	5,000	7148,800	32909,51	36124,00	34230,49	36181,04
2	2,500	2911,945	13929,59	16080,17	14472,99	16106,63
3	1,667	1818,174	8823,731	10366,61	9150,379	10382,75
4	1,250	1319,874	6486,958	7683,027	6712,190	7693,007
5	1,000	1035,739	5169,683	6144,645	5336,533	6150,020
6	0,833	851,7875	4332,230	5153,309	4461,138	5154,814
7	0,714	723,4915	3766,005	4474,581	3868,561	4472,638
8	0,625	629,0249	3365,428	3988,189	3448,730	3983,059
9	0,556	556,6497	3073,392	3628,532	3142,098	3620,388
10	0,500	498,4586	2846,754	3345,214	2903,763	3334,142
11	0,454	451,0230	2672,505	3123,432	2720,102	3109,510
12	0,417	413,1052	2551,295	2964,673	2591,628	2948,016
13	0,385	380,4806	2452,503	2832,161	2486,629	2812,786
14	0,357	352,0623	2371,995	2721,098	2400,786	2699,017
15	0,333	327,7986	2313,455	2636,193	2337,826	2611,450
16	0,312	306,6394	2270,369	2569,652	2290,994	2542,270
17	0,294	288,5559	2244,720	2524,057	2262,272	2494,082
18	0,278	272,5226	2229,007	2490,298	2243,918	2457,746
19	0,263	257,5263	2215,564	2458,971	2228,058	2423,818
20	0,250	244,5568	2214,283	2442,363	2224,795	2404,650
21	0,238	232,6073	2217,076	2430,521	2225,832	2390,244
22	0,227	221,6726	2224,602	2424,298	2231,827	2381,460
23	0,217	211,7475	2237,375	2424,370	2243,289	2378,981
24	0,208	202,8277	2255,790	2431,271	2260,600	2383,348
25	0,200	194,9090	2280,156	2445,431	2284,056	2394,998
26	0,192	186,9999	2302,271	2456,596	2305,316	2403,617
27	0,185	180,0872	2330,863	2475,728	2333,230	2420,235
28	0,178	173,1817	2357,742	2492,551	2359,492	2434,514
29	0,172	167,2685	2391,418	2517,800	2392,703	2457,260
30	0,167	162,3449	2431,958	2551,611	2432,904	2488,614

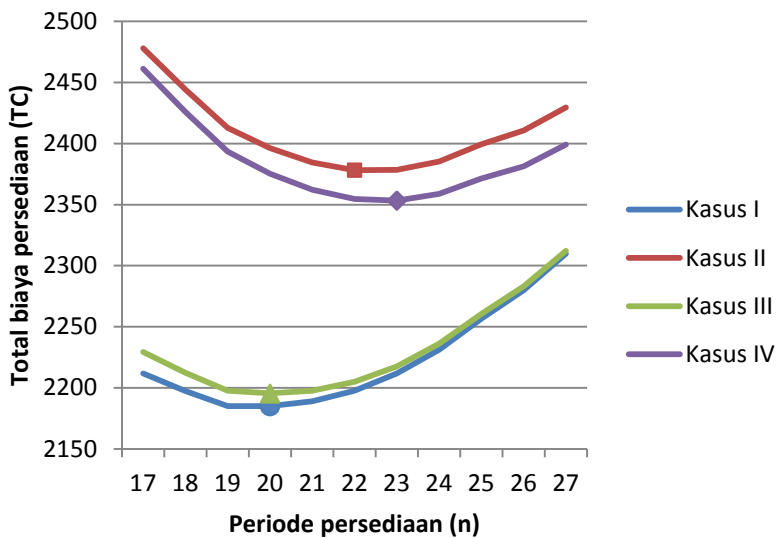
Grafik total biaya persediaan dengan nilai $M=0,10$



Lampiran 14. Total biaya persediaan dengan nilai $M = 0, 12$

n	T(tahun)	Q (unit)	TC ₁ (\$)	TC ₂ (\$)	TC ₃ (\$)	TC ₄ (\$)
1	5,000	7148,800	32834,69	36077,92	34155,68	36106,22
2	2,500	2911,945	13869,98	16034,09	14413,38	16047,03
3	1,667	1818,174	8769,179	10320,52	9095,828	10328,20
4	1,250	1319,874	6435,397	7636,947	6660,629	7641,445
5	1,000	1035,739	5120,323	6098,565	5287,174	6100,661
6	0,833	851,7875	4284,724	5107,248	4413,632	5107,308
7	0,714	723,4915	3720,122	4428,520	3822,677	4426,755
8	0,625	629,0249	3321,019	3942,109	3404,320	3938,650
9	0,556	556,6497	3030,351	3582,416	3099,057	3577,347
10	0,500	498,4586	2805,112	3299,134	2862,121	3292,500
11	0,454	451,0230	2632,242	3077,407	2679,839	3069,247
12	0,417	413,1052	2512,206	2918,556	2552,539	2908,926
13	0,385	380,4806	2414,662	2786,035	2448,788	2774,945
14	0,357	352,0623	2335,470	2675,036	2364,261	2662,492
15	0,333	327,7986	2278,187	2590,159	2302,559	2576,182
16	0,312	306,6394	2236,346	2523,646	2256,972	2508,247
17	0,294	288,5559	2211,836	2477,996	2229,388	2461,199
18	0,278	272,5226	2197,255	2444,181	2212,167	2425,994
19	0,263	257,5263	2185,075	2412,918	2197,570	2393,329
20	0,250	244,5568	2184,945	2396,283	2195,457	2375,312
21	0,238	232,6073	2188,937	2384,460	2197,692	2362,105
22	0,227	221,6726	2197,679	2378,274	2204,904	2354,537
23	0,217	211,7475	2211,653	2378,373	2217,567	2353,259
24	0,208	202,8277	2231,223	2385,264	2236,034	2358,782
25	0,200	194,9090	2256,669	2399,351	2260,569	2371,511
26	0,192	186,9999	2280,029	2410,590	2283,074	2381,375
27	0,185	180,0872	2309,748	2429,694	2312,116	2399,121
28	0,178	173,1817	2337,900	2446,619	2339,650	2414,672
29	0,172	167,2685	2372,689	2471,831	2373,974	2438,530
30	0,167	162,3449	2414,152	2505,439	2415,098	2470,808

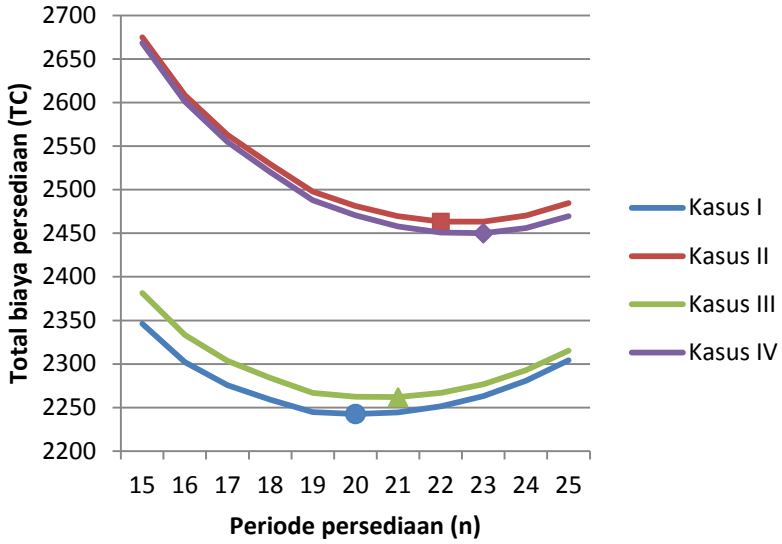
Grafik total biaya persediaan dengan nilai $M=0,12$



Lampiran 15. Total biaya persediaan dengan nilai $N = 0, 10$

n	T(tahun)	Q (unit)	TC ₁ (\$)	TC ₂ (\$)	TC ₃ (\$)	TC ₄ (\$)
1	5,000	7148,800	32973,44	36163,17	34319,29	36187,93
2	2,500	2911,945	13980,72	16119,34	14543,89	16131,30
3	1,667	1818,174	8870,718	10405,79	9215,420	10413,60
4	1,250	1319,874	6531,560	7722,195	6773,815	7727,629
5	1,000	1035,739	5212,571	6183,813	5395,677	6187,533
6	0,833	851,7875	4373,702	5192,462	4518,215	5194,781
7	0,714	723,4915	3806,257	4513,734	3923,842	4514,833
8	0,625	629,0249	3404,587	4027,357	3502,394	4027,349
9	0,556	556,6497	3111,548	3667,732	3194,269	3666,688
10	0,500	498,4586	2883,880	3384,382	2954,404	3382,340
11	0,454	451,0230	2708,619	3162,553	2769,237	3159,546
12	0,417	413,1052	2586,572	3003,872	2639,501	2999,950
13	0,385	380,4806	2486,879	2871,369	2533,152	2866,538
14	0,357	352,0623	2405,414	2760,250	2445,878	2754,516
15	0,333	327,7986	2345,964	2675,322	2381,557	2668,703
16	0,312	306,6394	2301,980	2608,757	2333,378	2601,264
17	0,294	288,5559	2275,523	2563,209	2303,433	2554,861
18	0,278	272,5226	2259,010	2529,497	2283,868	2520,300
19	0,263	257,5263	2244,653	2498,115	2266,640	2488,060
20	0,250	244,5568	2242,555	2481,531	2262,141	2470,635
21	0,238	232,6073	2244,489	2469,674	2261,885	2457,934
22	0,227	221,6726	2251,142	2463,419	2266,569	2450,838
23	0,217	211,7475	2263,054	2463,467	2276,736	2450,049
24	0,208	202,8277	2280,647	2470,376	2292,806	2456,128
25	0,200	194,9090	2304,257	2484,599	2315,111	2469,531
26	0,192	186,9999	2290,468	2433,593	2335,024	2479,799
27	0,185	180,0872	2319,598	2452,711	2361,731	2498,133
28	0,178	173,1817	2347,088	2469,585	2386,614	2514,035
29	0,172	167,2685	2381,295	2494,816	2418,635	2538,499
30	0,167	162,3449	2422,271	2528,525	2457,870	2571,686

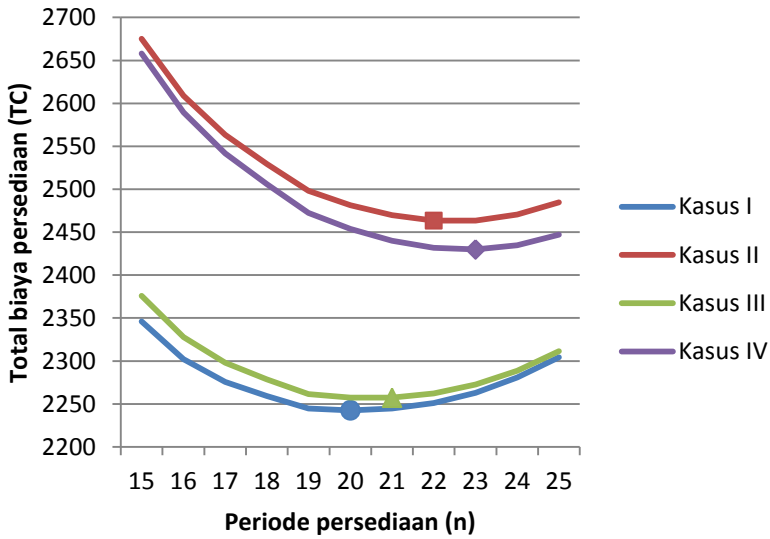
Grafik total biaya persediaan dengan nilai $N=0,10$



Lampiran 16. Total biaya persediaan dengan nilai $N = 0, 12$

n	T(tahun)	Q (unit)	TC ₁ (\$)	TC ₂ (\$)	TC ₃ (\$)	TC ₄ (\$)
1	5,000	7148,800	32973,44	36163,17	34306,82	36216,66
2	2,500	2911,945	13980,72	16119,34	14533,96	16144,83
3	1,667	1818,174	8870,718	10405,79	9206,328	10422,06
4	1,250	1319,874	6531,560	7722,195	6765,221	7733,110
5	1,000	1035,739	5212,571	6183,813	5387,450	6190,812
6	0,833	851,7875	4373,702	5192,462	4510,297	5196,226
7	0,714	723,4915	3806,257	4513,734	3916,195	4514,655
8	0,625	629,0249	3404,587	4027,357	3494,992	4025,678
9	0,556	556,6497	3111,548	3667,732	3187,096	3663,613
10	0,500	498,4586	2883,880	3384,382	2947,463	3377,901
11	0,454	451,0230	2708,619	3162,553	2762,527	3153,784
12	0,417	413,1052	2586,572	3003,872	2632,986	2992,922
13	0,385	380,4806	2486,879	2871,369	2526,845	2858,253
14	0,357	352,0623	2405,414	2760,250	2439,791	2744,980
15	0,333	327,7986	2345,964	2675,322	2375,679	2657,937
16	0,312	306,6394	2301,980	2608,757	2327,707	2589,280
17	0,294	288,5559	2275,523	2563,209	2297,953	2541,683
18	0,278	272,5226	2259,010	2529,497	2278,576	2505,935
19	0,263	257,5263	2244,653	2498,115	2261,558	2472,496
20	0,250	244,5568	2242,555	2481,531	2257,252	2453,893
21	0,238	232,6073	2244,489	2469,674	2257,196	2440,012
22	0,227	221,6726	2251,142	2463,419	2262,082	2431,737
23	0,217	211,7475	2263,054	2463,467	2272,449	2429,774
24	0,208	202,8277	2280,647	2470,376	2288,712	2434,688
25	0,200	194,9090	2304,257	2484,599	2311,196	2446,938
26	0,192	186,9999	2290,468	2433,593	2331,317	2456,034
27	0,185	180,0872	2319,598	2452,711	2358,212	2473,214
28	0,178	173,1817	2347,088	2469,585	2383,307	2487,945
29	0,172	167,2685	2381,295	2494,816	2415,513	2511,259
30	0,167	162,3449	2422,271	2528,525	2454,903	2543,320

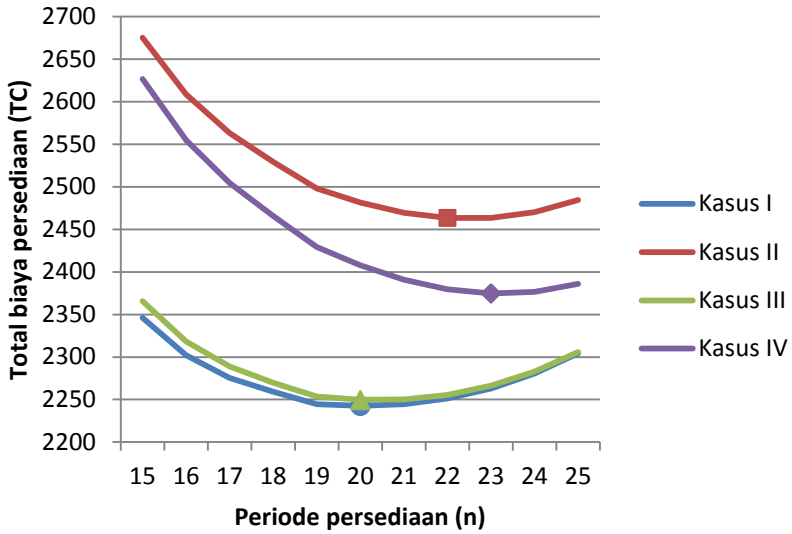
Grafik total biaya persediaan dengan nilai $N=0,12$



Lampiran 17. Total biaya persediaan dengan nilai $N = 0, 16$

n	T(tahun)	Q (unit)	TC ₁ (\$)	TC ₂ (\$)	TC ₃ (\$)	TC ₄ (\$)
1	5,000	7148,800	32973,44	36163,17	34282,10	36272,84
2	2,500	2911,945	13980,72	16119,34	14514,39	16170,11
3	1,667	1818,174	8870,718	10405,79	9188,536	10436,63
4	1,250	1319,874	6531,560	7722,195	6748,525	7741,127
5	1,000	1035,739	5212,571	6183,813	5371,588	6193,825
6	0,833	851,7875	4373,702	5192,462	4495,153	5194,965
7	0,714	723,4915	3806,257	4513,734	3901,693	4509,543
8	0,625	629,0249	3404,587	4027,357	3481,083	4016,974
9	0,556	556,6497	3111,548	3667,732	3173,744	3651,490
10	0,500	498,4586	2883,880	3384,382	2934,679	3362,446
11	0,454	451,0230	2708,619	3162,553	2750,304	3135,073
12	0,417	413,1052	2586,572	3003,872	2621,256	2971,069
13	0,385	380,4806	2486,879	2871,369	2515,633	2833,276
14	0,357	352,0623	2405,414	2760,250	2429,118	2716,892
15	0,333	327,7986	2345,964	2675,322	2365,527	2626,781
16	0,312	306,6394	2301,980	2608,757	2318,072	2555,079
17	0,294	288,5559	2275,523	2563,209	2288,799	2504,482
18	0,278	272,5226	2259,010	2529,497	2269,901	2465,750
19	0,263	257,5263	2244,653	2498,115	2253,406	2429,306
20	0,250	244,5568	2242,555	2481,531	2249,585	2407,735
21	0,238	232,6073	2244,489	2469,674	2250,030	2390,883
22	0,227	221,6726	2251,142	2463,419	2255,423	2379,641
23	0,217	211,7475	2263,054	2463,467	2266,292	2374,721
24	0,208	202,8277	2280,647	2470,376	2283,042	2376,695
25	0,200	194,9090	2304,257	2484,599	2305,988	2386,028
26	0,192	186,9999	2290,468	2433,593	2326,626	2392,172
27	0,185	180,0872	2319,598	2452,711	2353,998	2406,431
28	0,178	173,1817	2347,088	2469,585	2379,619	2418,212
29	0,172	167,2685	2381,295	2494,816	2412,297	2438,615
30	0,167	162,3449	2422,271	2528,525	2452,097	2467,812

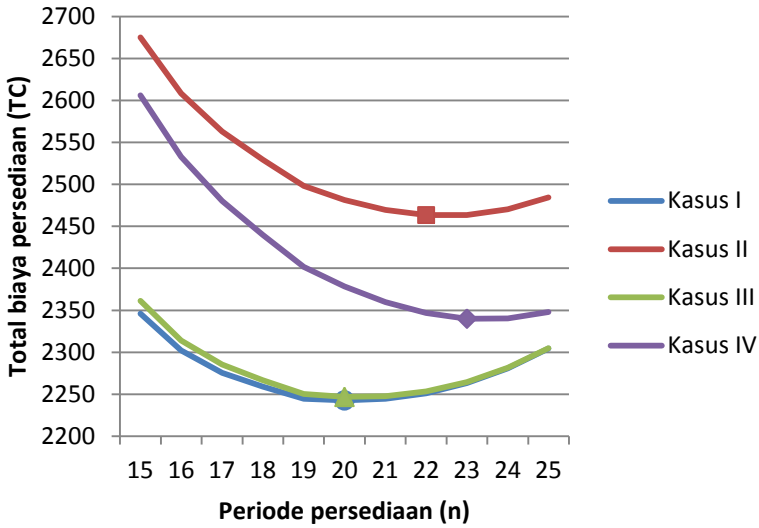
Grafik total biaya persediaan dengan nilai $N=0,16$



Lampiran 18. Total biaya persediaan dengan nilai $N = 0, 18$

n	T(tahun)	Q (unit)	TC ₁ (\$)	TC ₂ (\$)	TC ₃ (\$)	TC ₄ (\$)
1	5,000	7148,800	32973,44	36163,17	34269,84	36300,28
2	2,500	2911,945	13980,72	16119,34	14504,75	16181,86
3	1,667	1818,174	8870,718	10405,79	9179,835	10442,75
4	1,250	1319,874	6531,560	7722,195	6740,422	7743,669
5	1,000	1035,739	5212,571	6183,813	5363,952	6193,565
6	0,833	851,7875	4373,702	5192,462	4487,926	5192,268
7	0,714	723,4915	3806,257	4513,734	3894,837	4504,618
8	0,625	629,0249	3404,587	4027,357	3474,573	4009,952
9	0,556	556,6497	3111,548	3667,732	3167,563	3642,455
10	0,500	498,4586	2883,880	3384,382	2928,833	3351,441
11	0,454	451,0230	2708,619	3162,553	2744,789	3122,138
12	0,417	413,1052	2586,572	3003,872	2616,038	2956,260
13	0,385	380,4806	2486,879	2871,369	2510,724	2816,601
14	0,357	352,0623	2405,414	2760,250	2424,530	2698,359
15	0,333	327,7986	2345,964	2675,322	2361,250	2606,409
16	0,312	306,6394	2301,980	2608,757	2314,104	2532,882
17	0,294	288,5559	2275,523	2563,209	2285,122	2480,481
18	0,278	272,5226	2259,010	2529,497	2266,515	2439,954
19	0,263	257,5263	2244,653	2498,115	2250,331	2401,702
20	0,250	244,5568	2242,555	2481,531	2246,803	2378,344
21	0,238	232,6073	2244,489	2469,674	2247,550	2359,703
22	0,227	221,6726	2251,142	2463,419	2253,247	2346,674
23	0,217	211,7475	2263,054	2463,467	2264,417	2339,972
24	0,208	202,8277	2280,647	2470,376	2281,461	2340,172
25	0,200	194,9090	2304,257	2484,599	2304,689	2347,742
26	0,192	186,9999	2290,468	2433,593	2325,635	2352,106
27	0,185	180,0872	2319,598	2452,711	2353,297	2364,601
28	0,178	173,1817	2347,088	2469,585	2379,231	2374,604
29	0,172	167,2685	2381,295	2494,816	2412,197	2393,248
30	0,167	162,3449	2422,271	2528,525	2452,252	2420,708

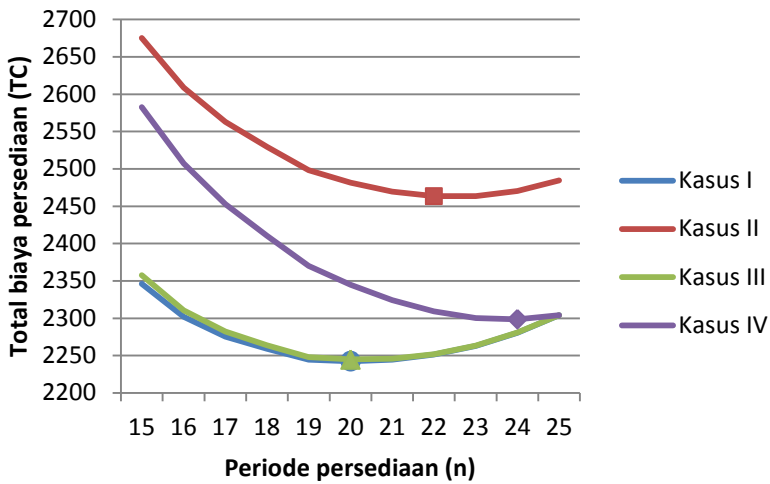
Grafik total biaya persediaan dengan nilai $N=0,18$



Lampiran 19. Total biaya persediaan dengan nilai $N = 0, 20$

n	T(tahun)	Q (unit)	TC ₁ (\$)	TC ₂ (\$)	TC ₃ (\$)	TC ₄ (\$)
1	5,000	7148,800	32973,44	36163,17	34257,66	36327,3
2	2,500	2911,945	13980,72	16119,34	14495,21	16193,03
3	1,667	1818,174	8870,718	10405,79	9171,264	10448,09
4	1,250	1319,874	6531,560	7722,195	6732,480	7745,237
5	1,000	1035,739	5212,571	6183,813	5356,510	6192,133
6	0,833	851,7875	4373,702	5192,462	4480,927	5188,199
7	0,714	723,4915	3806,257	4513,734	3888,243	4498,121
8	0,625	629,0249	3404,587	4027,357	3468,359	4001,156
9	0,556	556,6497	3111,548	3667,732	3161,712	3631,445
10	0,500	498,4586	2883,880	3384,382	2923,350	3338,261
11	0,454	451,0230	2708,619	3162,553	2739,670	3106,826
12	0,417	413,1052	2586,572	3003,872	2611,250	2938,872
13	0,385	380,4806	2486,879	2871,369	2506,279	2797,147
14	0,357	352,0623	2405,414	2760,250	2420,439	2676,844
15	0,333	327,7986	2345,964	2675,322	2357,503	2582,856
16	0,312	306,6394	2301,980	2608,757	2310,700	2507,301
17	0,294	288,5559	2275,523	2563,209	2282,043	2452,894
18	0,278	272,5226	2259,010	2529,497	2263,759	2410,369
19	0,263	257,5263	2244,653	2498,115	2247,921	2370,110
20	0,250	244,5568	2242,555	2481,531	2244,720	2344,762
21	0,238	232,6073	2244,489	2469,674	2245,801	2324,131
22	0,227	221,6726	2251,142	2463,419	2251,836	2309,113
23	0,217	211,7475	2263,054	2463,467	2263,342	2300,427
24	0,208	202,8277	2280,647	2470,376	2280,714	2298,651
25	0,200	194,9090	2304,257	2484,599	2304,257	2304,257
26	0,192	186,9999	2290,468	2433,593	2325,545	2306,640
27	0,185	180,0872	2319,598	2452,711	2353,530	2317,169
28	0,178	173,1817	2347,088	2469,585	2379,811	2325,192
29	0,172	167,2685	2381,295	2494,816	2413,098	2341,875
30	0,167	162,3449	2422,271	2528,525	2453,442	2367,395

Grafik total biaya persediaan dengan nilai $N=0,20$



Lampiran 20. Uji turunan pada total biaya persediaan (sub bab 3.1.5)

Turunan pertama biaya total pengisian ($C_R'(T)$) adalah sebagai berikut

$$\begin{aligned} C_R(T) &= A \\ C_R'(T) &= 0. \end{aligned}$$

Turunan pertama biaya total kerusakan barang ($C_D'(T)$) adalah sebagai berikut

$$\begin{aligned} C_D(T) &= \frac{cD}{\theta} (e^{\theta T} - \theta T - 1) \\ C_D'(T) &= \frac{cD}{\theta} (\theta e^{\theta T} - \theta - 0) \\ &= \frac{cD\theta}{\theta} (e^{\theta T} - 1) \\ C_D'(T) &= cD(e^{\theta T} - 1). \end{aligned}$$

Turunan pertama biaya total penyimpanan ($C_H'(T)$) adalah sebagai berikut

$$\begin{aligned} C_H(T) &= \frac{hD}{\theta^2} (e^{\theta T} - \theta T - 1) \\ C_H'(T) &= \frac{hD}{\theta^2} (\theta e^{\theta T} - \theta - 0) \\ &= \frac{hD\theta}{\theta^2} (e^{\theta T} - 1) \\ C_H'(T) &= \frac{hD}{\theta} (e^{\theta T} - 1). \end{aligned}$$

Untuk kasus I, turunan pertama biaya yang dibebankan ($I_{p_1}'(T)$) adalah sebagai berikut

$$\begin{aligned} I_{p_1}(T) &= \frac{DcI_c}{\theta} (e^{\theta(T-M)} - \theta(T-M) - 1) \\ I_{p_1}'(T) &= \frac{DcI_c}{\theta} (\theta e^{\theta T} - \theta - 0) \\ &= \frac{DcI_c\theta}{\theta} (e^{\theta T} - 1) \\ I_{p_1}'(T) &= DcI_c(e^{\theta T} - 1), \end{aligned}$$

turunan pertama untuk biaya yang diperoleh ($I_{e_1}'(T)$) adalah

$$I_{e_1}(T) = \frac{cI_eDT^2}{2}$$

$$I_{e_1}'(T) = \frac{2cI_eDT}{2}$$

$$I_{e_1}(T) = cI_eDT.$$

Untuk kasus II, turunan pertama biaya yang dibebankan ($I_{p_2}'(T)$) adalah sebagai berikut

$$I_{p_2}(T) = 0$$

$$I_{p_2}'(T) = 0,$$

turunan pertama untuk biaya yang diperoleh ($I_{e_2}'(T)$) adalah

$$I_{e_2}(T) = \frac{cI_eDT}{2} (2M - T)$$

$$I_{e_2}'(T) = McI_eDT - \frac{cI_eDT^2}{2}$$

$$I_{e_2}(T) = McI_eD - cI_eDT.$$

Untuk kasus III, turunan pertama biaya yang dibebankan ($I_{p_3}'(T)$) adalah sebagai berikut

$$I_{p_3}(T) = \frac{cD}{\theta^2} [I_c(e^{\theta(T-M)} - e^{\theta(T-N)} - \theta(N-M)) + I_w(e^{\theta(T-N)} - \theta(T-N) - 1)]$$

$$I_{p_3}'(T) = \frac{cD}{\theta^2} [I_c(\theta e^{\theta T} - \theta e^{\theta T} - 0) + I_w(\theta e^{\theta T} - \theta - 0)]$$

$$= \frac{cD}{\theta^2} (I_w\theta(e^{\theta T} - 1))$$

$$I_{p_3}'(T) = \frac{cDI_w}{\theta} (e^{\theta T} - 1),$$

turunan pertama untuk biaya yang diperoleh ($I_{e_3}'(T)$) adalah

$$I_{e_3}(T) = \frac{cI_eDT^2}{2}$$

$$I_{e_3}'(T) = \frac{2cI_eDT}{2}$$

$$I_{e_3}(T) = cI_eDT.$$

Untuk kasus IV, turunan pertama biaya yang dibebankan ($I_{p_4}'(T)$) adalah sebagai berikut

$$I_{p_4}(T) = \frac{cI_cD}{\theta^2} (e^{\theta(T-M)} - e^{\theta(T-N)} - \theta(N-M))$$

$$I_{p_4}'(T) = \frac{cI_cD}{\theta^2} (\theta e^{\theta T} - \theta e^{\theta T} - 0)$$

$$I_{p_4}'(T) = 0,$$

turunan pertama untuk biaya yang diperoleh ($I_{e_4}'(T)$) adalah

$$I_{e_4}(T) = \frac{cI_eDT}{2} (2N - T)$$

$$I_{e_4}'(T) = NcI_eDT - \frac{cI_eDT^2}{2}$$

$$I_{e_4}'(T) = NcI_eD - cI_eDT$$

Total biaya persediaan untuk kasus yang pertama adalah

$$\begin{aligned} TC_1(n) &= n[C_R'(T) + C_D'(T) + C_H'(T) + I_{p_1}'(T) - I_{e_1}'(T)] \\ &= n \left[0 + cD(e^{\theta T} - 1) + \frac{hD}{\theta}(e^{\theta T} - 1) + DcI_c(e^{\theta T} - 1) - cI_eDT \right] \end{aligned}$$

Total biaya persediaan untuk kasus yang kedua adalah

$$\begin{aligned} TC_2(n) &= n[C_R'(T) + C_D'(T) + C_H'(T) + I_{p_2}'(T) - I_{e_2}'(T)] \\ &= n \left[0 + cD(e^{\theta T} - 1) + \frac{hD}{\theta}(e^{\theta T} - 1) + 0 - (McI_eD - cI_eDT) \right] \end{aligned}$$

Total biaya persediaan untuk kasus yang ketiga adalah

$$\begin{aligned} TC_3(n) &= n[C_R'(T) + C_D'(T) + C_H'(T) + I_{p_3}'(T) - I_{e_3}'(T)] \\ &= n \left[0 + cD(e^{\theta T} - 1) + \frac{hD}{\theta}(e^{\theta T} - 1) + \frac{cDI_w}{\theta}(e^{\theta T} - 1) \right. \\ &\quad \left. - cI_eDT \right] \end{aligned}$$

Total biaya persediaan untuk kasus yang keempat adalah

$$\begin{aligned} TC_4(n) &= n[C_R'(T) + C_D'(T) + C_H'(T) + I_{p_4}'(T) - I_{e_4}'(T)] \\ &= n \left[0 + cD(e^{\theta T} - 1) + \frac{hD}{\theta}(e^{\theta T} - 1) + 0 - (NcI_eD - cI_eDT) \right] \end{aligned}$$

Berikut ini merupakan hasil simulasi numerik untuk turunan pertama dari total biaya persediaan.

n	T(tahun)	Q (unit)	TC ₁ (\$)	TC ₂ (\$)	TC ₃ (\$)	TC ₄ (\$)
1	5,000	7148,800	12215,21	16205,91	6489,024	16179,65
2	2,500	2911,945	9524,321	13584,09	4859,385	13531,56
3	1,667	1818,174	8773,671	12826,04	4404,600	12747,24
4	1,250	1319,874	8418,653	12446,03	4189,778	12340,97
5	1,000	1035,739	8213,931	12211,22	4065,796	12079,90
6	0,833	851,7875	8076,804	12039,51	3983,113	11881,92
7	0,714	723,4915	7982,801	11911,01	3926,184	11727,15
8	0,625	629,0249	7916,397	11810,82	3885,605	11600,69
9	0,556	556,6497	7869,156	11730,83	3856,269	11494,44
10	0,500	498,4586	7819,693	11641,48	3827,040	11378,82
11	0,454	451,0230	7775,071	11554,97	3801,107	11266,05
12	0,417	413,1052	7762,356	11513,55	3791,589	11198,36
13	0,385	380,4806	7739,526	11454,29	3777,581	11112,83
14	0,357	352,0623	7707,462	11378,93	3759,435	11011,21
15	0,333	327,7986	7684,689	11316,11	3746,189	10922,13
16	0,312	306,6394	7664,240	11255,52	3734,350	10835,27
17	0,294	288,5559	7659,891	11218,52	3730,625	10772,00
18	0,278	272,5226	7657,038	11182,95	3727,807	10710,17
19	0,263	257,5263	7635,065	11117,29	3715,772	10618,24
20	0,250	244,5568	7629,896	11076,79	3712,097	10551,47
21	0,238	232,6073	7617,857	11025,17	3705,169	10473,60
22	0,227	221,6726	7603,538	10969,57	3697,224	10391,72
23	0,217	211,7475	7591,508	10917,06	3690,484	10312,95
24	0,208	202,8277	7586,318	10874,73	3687,159	10244,36
25	0,200	194,9090	7592,505	10849,65	3689,452	10193,01
26	0,192	186,9999	7574,402	10786,80	3679,942	10103,90
27	0,185	180,0872	7573,743	10750,63	3678,998	10041,46
28	0,178	173,1817	7551,869	10681,45	3667,750	9946,011
29	0,172	167,2685	7508,823	10579,29	3646,224	9817,589
30	0,167	162,3449	7583,066	10658,39	3681,918	9870,424
31	0,162	157,4250	7597,496	10644,84	3688,476	9830,605
32	0,157	152,5087	7596,789	10607,72	3687,685	9767,221
33	0,152	147,5962	7580,968	10547,06	3679,557	9680,292
34	0,147	142,6873	7550,054	10462,87	3664,106	9569,841
35	0,142	137,7822	7504,070	10355,19	3641,346	9435,889