

積立シミュレーション

問題：

毎月1万円ずつ、10年間、ドルコスト平均法で積立投資します（10年間で積立元本120万円）。

このとき、下図のように株価が5年間下落し1/5まで下落、その後、5年間かけて元の値に戻ったとします。

さて、この時、採取的な積立評価額はいくらになるでしょうか？

年目	月	経過月数	価格	積立額	買付数	買付累計	積立評価額
1	1	1	¥100,000	¥10,000	0.10000	0.10000	¥10,000
1	2	2	¥98,667	¥10,000	0.10135	0.20135	¥19,867
1	3	3	¥97,333	¥10,000	0.10274	0.30409	¥29,598
1	4	4	¥96,000	¥10,000	0.10417	0.40826	¥39,193
1	5	5	¥94,667	¥10,000	0.10563	0.51389	¥48,648
1	6	6	¥93,333	¥10,000	0.10714	0.62103	¥57,963
1	7	7	¥92,000	¥10,000	0.10870	0.72973	¥67,135
1	8	8	¥90,667	¥10,000	0.11029	0.84002	¥76,162
1	9	9	¥89,333	¥10,000	0.11194	0.95196	¥85,042
1	10	10	¥88,000	¥10,000	0.11364	1.06560	¥93,773
1	11	11	¥86,667	¥10,000	0.11538	1.18099	¥102,352
1	12	12	¥85,333	¥10,000	0.11719	1.29817	¥110,777
2	1	13	¥84,000	¥10,000	0.11905	1.41722	¥119,047
2	2	14	¥82,667	¥10,000	0.12097	1.53819	¥127,157
2	3	15	¥81,333	¥10,000	0.12295	1.66114	¥135,106
2	4	16	¥80,000	¥10,000	0.12500	1.78614	¥142,891
2	5	17	¥78,667	¥10,000	0.12712	1.91326	¥150,510
2	6	18	¥77,333	¥10,000	0.12931	2.04257	¥157,959
2	7	19	¥76,000	¥10,000	0.13158	2.17415	¥165,235
2	8	20	¥74,667	¥10,000	0.13393	2.30808	¥172,336
2	9	21	¥73,333	¥10,000	0.13636	2.44444	¥179,259
2	10	22	¥72,000	¥10,000	0.13889	2.58333	¥186,000
2	11	23	¥70,667	¥10,000	0.14151	2.72484	¥192,555
2	12	24	¥69,333	¥10,000	0.14423	2.86907	¥198,922
3	1	25	¥68,000	¥10,000	0.14706	3.01613	¥205,097
3	2	26	¥66,667	¥10,000	0.15000	3.16613	¥211,075
3	3	27	¥65,333	¥10,000	0.15306	3.31919	¥216,854
3	4	28	¥64,000	¥10,000	0.15625	3.47544	¥222,428
3	5	29	¥62,667	¥10,000	0.15957	3.63501	¥227,794
3	6	30	¥61,333	¥10,000	0.16304	3.79806	¥232,947
3	7	31	¥60,000	¥10,000	0.16667	3.96472	¥237,883
3	8	32	¥58,667	¥10,000	0.17045	4.13518	¥242,597
3	9	33	¥57,333	¥10,000	0.17442	4.30960	¥247,084
3	10	34	¥56,000	¥10,000	0.17857	4.48817	¥251,337
3	11	35	¥54,667	¥10,000	0.18293	4.67109	¥255,353
3	12	36	¥53,333	¥10,000	0.18750	4.85859	¥259,125
4	1	37	¥52,000	¥10,000	0.19231	5.05090	¥262,647
4	2	38	¥50,667	¥10,000	0.19737	5.24827	¥265,912
4	3	39	¥49,333	¥10,000	0.20270	5.45097	¥268,915
4	4	40	¥48,000	¥10,000	0.20833	5.65931	¥271,647
4	5	41	¥46,667	¥10,000	0.21429	5.87359	¥274,101

4	6	42	¥45,333	¥10,000	0.22059	6.09418	¥276,270
4	7	43	¥44,000	¥10,000	0.22727	6.32145	¥278,144
4	8	44	¥42,667	¥10,000	0.23438	6.55583	¥279,715
4	9	45	¥41,333	¥10,000	0.24194	6.79776	¥280,974
4	10	46	¥40,000	¥10,000	0.25000	7.04776	¥281,911
4	11	47	¥38,667	¥10,000	0.25862	7.30638	¥282,514
4	12	48	¥37,333	¥10,000	0.26786	7.57424	¥282,772
5	1	49	¥36,000	¥10,000	0.27778	7.85202	¥282,673
5	2	50	¥34,667	¥10,000	0.28846	8.14048	¥282,203
5	3	51	¥33,333	¥10,000	0.30000	8.44048	¥281,349
5	4	52	¥32,000	¥10,000	0.31250	8.75298	¥280,095
5	5	53	¥30,667	¥10,000	0.32609	9.07907	¥278,425
5	6	54	¥29,333	¥10,000	0.34091	9.41998	¥276,319
5	7	55	¥28,000	¥10,000	0.35714	9.77712	¥273,759
5	8	56	¥26,667	¥10,000	0.37500	10.15212	¥270,723
5	9	57	¥25,333	¥10,000	0.39474	10.54686	¥267,187
5	10	58	¥24,000	¥10,000	0.41667	10.96352	¥263,125
5	11	59	¥22,667	¥10,000	0.44118	11.40470	¥258,507
5	12	60	¥21,333	¥10,000	0.46875	11.87345	¥253,300
6	1	61	¥20,000	¥10,000	0.50000	12.37345	¥247,469
6	2	62	¥21,333	¥10,000	0.46875	12.84220	¥273,967
6	3	63	¥22,667	¥10,000	0.44118	13.28338	¥301,090
6	4	64	¥24,000	¥10,000	0.41667	13.70004	¥328,801
6	5	65	¥25,333	¥10,000	0.39474	14.09478	¥357,068
6	6	66	¥26,667	¥10,000	0.37500	14.46978	¥385,861
6	7	67	¥28,000	¥10,000	0.35714	14.82692	¥415,154
6	8	68	¥29,333	¥10,000	0.34091	15.16783	¥444,923
6	9	69	¥30,667	¥10,000	0.32609	15.49392	¥475,147
6	10	70	¥32,000	¥10,000	0.31250	15.80642	¥505,805
6	11	71	¥33,333	¥10,000	0.30000	16.10642	¥536,881
6	12	72	¥34,667	¥10,000	0.28846	16.39488	¥568,356
7	1	73	¥36,000	¥10,000	0.27778	16.67266	¥600,216
7	2	74	¥37,333	¥10,000	0.26786	16.94052	¥632,446
7	3	75	¥38,667	¥10,000	0.25862	17.19914	¥665,033
7	4	76	¥40,000	¥10,000	0.25000	17.44914	¥697,965
7	5	77	¥41,333	¥10,000	0.24194	17.69107	¥731,231
7	6	78	¥42,667	¥10,000	0.23438	17.92545	¥764,819
7	7	79	¥44,000	¥10,000	0.22727	18.15272	¥798,720
7	8	80	¥45,333	¥10,000	0.22059	18.37331	¥832,923
7	9	81	¥46,667	¥10,000	0.21429	18.58759	¥867,421
7	10	82	¥48,000	¥10,000	0.20833	18.79593	¥902,204
7	11	83	¥49,333	¥10,000	0.20270	18.99863	¥937,266
7	12	84	¥50,667	¥10,000	0.19737	19.19600	¥972,597
8	1	85	¥52,000	¥10,000	0.19231	19.38831	¥1,008,192
8	2	86	¥53,333	¥10,000	0.18750	19.57581	¥1,044,043
8	3	87	¥54,667	¥10,000	0.18293	19.75873	¥1,080,144
8	4	88	¥56,000	¥10,000	0.17857	19.93730	¥1,116,489
8	5	89	¥57,333	¥10,000	0.17442	20.11172	¥1,153,072
8	6	90	¥58,667	¥10,000	0.17045	20.28218	¥1,189,888
8	7	91	¥60,000	¥10,000	0.16667	20.44884	¥1,226,931
8	8	92	¥61,333	¥10,000	0.16304	20.61189	¥1,264,196

8	9	93	¥62,667	¥10,000	0.15957	20.77146	¥1,301,678
8	10	94	¥64,000	¥10,000	0.15625	20.92771	¥1,339,374
8	11	95	¥65,333	¥10,000	0.15306	21.08077	¥1,377,277
8	12	96	¥66,667	¥10,000	0.15000	21.23077	¥1,415,385
9	1	97	¥68,000	¥10,000	0.14706	21.37783	¥1,453,693
9	2	98	¥69,333	¥10,000	0.14423	21.52206	¥1,492,196
9	3	99	¥70,667	¥10,000	0.14151	21.66357	¥1,530,892
9	4	100	¥72,000	¥10,000	0.13889	21.80246	¥1,569,777
9	5	101	¥73,333	¥10,000	0.13636	21.93882	¥1,608,847
9	6	102	¥74,667	¥10,000	0.13393	22.07275	¥1,648,099
9	7	103	¥76,000	¥10,000	0.13158	22.20433	¥1,687,529
9	8	104	¥77,333	¥10,000	0.12931	22.33364	¥1,727,135
9	9	105	¥78,667	¥10,000	0.12712	22.46076	¥1,766,913
9	10	106	¥80,000	¥10,000	0.12500	22.58576	¥1,806,861
9	11	107	¥81,333	¥10,000	0.12295	22.70871	¥1,846,975
9	12	108	¥82,667	¥10,000	0.12097	22.82968	¥1,887,253
10	1	109	¥84,000	¥10,000	0.11905	22.94873	¥1,927,693
10	2	110	¥85,333	¥10,000	0.11719	23.06591	¥1,968,291
10	3	111	¥86,667	¥10,000	0.11538	23.18130	¥2,009,046
10	4	112	¥88,000	¥10,000	0.11364	23.29494	¥2,049,954
10	5	113	¥89,333	¥10,000	0.11194	23.40688	¥2,091,014
10	6	114	¥90,667	¥10,000	0.11029	23.51717	¥2,132,223
10	7	115	¥92,000	¥10,000	0.10870	23.62587	¥2,173,580
10	8	116	¥93,333	¥10,000	0.10714	23.73301	¥2,215,081
10	9	117	¥94,667	¥10,000	0.10563	23.83864	¥2,256,725
10	10	118	¥96,000	¥10,000	0.10417	23.94281	¥2,298,510
10	11	119	¥97,333	¥10,000	0.10274	24.04555	¥2,340,433
10	12	120	¥98,667	¥10,000	0.10135	24.14690	¥2,382,494
最終		121	¥100,000			24.14690	¥2,414,690
			↑ 価格	積立累計額		↑ 買付累計数	↑ 最終積立額

