$\begin{array}{ccc} r = & 9.34\% \\ i = & 1.00\% \\ real growth rate of withdrawals = & 3\% \\ nominal growth rate of withdrawals = & \\ \end{array}$

<-- (sum of column E)

4.03% <-- enter formula g = (1+g_r)(1+i) - 1

					Account balance before	Account balance after
Period t =	Deposits	PV(Deposit)	Withdrawals	PV(Withdrawal)	deposit/withdrawal	deposit/withdrawal
0	0.00	0.00	0.00	0.00	0.00	0.00
1	0.00	0.00	0.00	0.00	0.00	0.00
2	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00
6	0.00	0.00	0.00	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.00
10	14,000.00	5,734.26	0.00	0.00	0.00	14,000.00
11	14,700.00	5,506.83	0.00	0.00	15,307.11	30,007.11
12	15,435.00	5,288.42	0.00	0.00	32,808.71	48,243.71
13	16,206.75	5,078.67	0.00	0.00	52,747.97	68,954.72
14				0.00		
15	17,017.09	4,877.24	0.00		75,392.66	92,409.74
	17,867.94	4,683.81	0.00	0.00	101,037.55	118,905.49
16	18,761.34	4,498.04	0.00	0.00	130,007.07	148,768.41
17	20,074.63	4,401.92	0.00	0.00	162,658.13	182,732.76
18	21,479.86	4,307.85	0.00	0.00	199,793.55	221,273.41
19	22,983.45	4,215.79	0.00	0.00	241,932.53	264,915.98
20	24,592.29	4,125.70	0.00	0.00	289,649.78	314,242.07
21	0.00	0.00	0.00	0.00	343,581.18	343,581.18
22	0.00	0.00	0.00	0.00	375,659.54	375,659.54
23	0.00	0.00	0.00	0.00	410,732.88	410,732.88
24	0.00	0.00	0.00	0.00	449,080.83	449,080.83
25	0.00	0.00	0.00	0.00	491,009.12	491,009.12
26	0.00	0.00	5,181.03	508.77	536,852.04	531,671.02
27	0.00	0.00	5,389.82	484.08	581,310.32	575,920.50
28	0.00	0.00	5,607.03	460.59	629,691.15	624,084.12
29	0.00	0.00	5,832.99	438.23	682,351.54	676,518.55
30	0.00	0.00	6,068.06	416.96	739,681.50	733,613.44
31	0.00	0.00	6,312.61	396.73	802,107.04	795,794.43
32	0.00	0.00	6,567.00	377.47	870,093.54	863,526.53
33	0.00	0.00	6,831.65	359.15	944,149.43	937,317.78
34	0.00	0.00	7,106.97	341.72	1,024,830.17	1,017,723.20
35	0.00	0.00	7,393.38	325.14	1,112,742.62	1,105,349.24
36	0.00	0.00	7,691.33	309.36	1,208,549.84	1,200,858.50
37	0.00	0.00	8,001.30	294.34	1,312,976.30	1,304,975.00
38	0.00	0.00	8,323.75	280.06	1,426,813.60	1,418,489.85
39	0.00	0.00	8,659.19	266.47	1,550,926.73	1,542,267.54
40	0.00	0.00	9,008.16	253.53	1,686,260.89	1,677,252.73
41	0.00	0.00	9,371.19	241.23	1,833,848.92	1,824,477.73
42	0.00	0.00	9,748.85	229.52	1,994,819.55	1,985,070.70
43	0.00	0.00	10,141.73	218.38	2,170,406.23	2,160,264.51
44	0.00	0.00	10,550.44	207.78	2,361,956.95	2,351,406.52
45	0.00	0.00	10,975.62	197.70	2,570,944.88	2,559,969.26
46	0.00	0.00	0.00	0.00	2,798,980.02	2,798,980.02
47	0.00	0.00	0.00	0.00	3,060,305.95	3,060,305.95
48	0.00	0.00	0.00	0.00	3,346,030.50	3,346,030.50
49	0.00	0.00	0.00	0.00	3,658,431.63	3,658,431.63
50	0.00	0.00	0.00	0.00	4,000,000.00	4,000,000.00
	DV/all danasits)	F2 740 F4	DV/-IIish daala\ >	C CO7 22	< (sum of solumn E)	

Note that PV(all deposits) should equal PV(all withdrawals) + PV(final balance)

PV(all withdrawals) -->

PV(final balance) --> sum

PV(all deposits) -->

(sum of column C)