

Brian Hill

Problem Set 5
Solution

HP-25 Program Form

Title Savings w/ Wage Growth and Asset Inflation Page 1 of 2

Switch to PRGM mode, press **[F]** **PRGM**, then key in the program.

test for success and failure
save wage growth
asset inflation
add interest to balance
Increment period

LINE	DISPLAY		KEY ENTRY	X	Y	Z	T	COMMENTS
	CODE							
00								
01	24 00	RCL 0	P					
02	24 07	RCL 7	S		P			
03	14 51	E224						
04	74	R/S	S					SUCCESS
05	24 05	RCL 5	F					
06	24 02	RCL 2	n		f			
07	14 41	FXSY						
08	13 10	GT0 10						
09	74	R/S	n					CONTINUE FAIL
10	24 01	RCL 1	D					
11	23 51 07	STO+7						Add to Balance
12	24 04	RCL 4	r					
13	61	X	rD					
14	23 51 01	STO+1						Wage Growth
15	24 00	RCL 0	P					
16	24 03	RCL 3	g					
17	61	X	rg					
18	23 51 00	STO+0						Asset Inflation
19	24 07	RCL 7	S					
20	24 06	RCL 6	i					
21	61	X	iS					
22	23 51 07	STO+7						Savings Interest
23	01	1						
24	23 51 02	STO+2						
25	13 01	GT0 01						
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REGISTERS	
R0	Asset Price P 50,000
R1	Payment D 1,000
R2	Period n 0
R3	Asset Inflation g 5 1/2%
R4	Wage Growth r 5 1/2%
R5	Fail Period f 120
R6	Savings Interest i 2 1/2 = 1/4%
R7	Savings Balance S 0

Succeeds with
63189.54
n=53

Fail case:
g = 12/12 = 1%
r = 4/12 = 1/3%
i = 2/12 = 1/6%

162049.58
165019.34

