

a 1000
 T 4 years
 r 0.1 pa.
 IP=PP 1 year

ahead p.	t	0	1	2	3	4
	a	1000	1000	1000	1000	years
	pv	1000	909.0909	826.4463	751.3148	
	B^0	3486.852				paid annuit
	Sum of Gec	3486.852				

	t	0	1	2	3	4
	a		1000	1000	1000	1000
	pv		909.0909	826.4463	751.3148	683.0135
	B^0	3169.865				
	Sum of Gec	3169.865				
	Short versio	3169.865				

1)

a 500
 r 0.065 p.q.
 T 12 years
 IP=PP 1 month

B^0 22500.56

B^1 22023.39

2)

ahead
 left side 6.972545
 a 143419.6

after
 left side 5.979885
 a 167227.3

IP>PP

B^0 3716306

B ^1 2919995

B 10000000
T 20 years
r 0.05 pa.
IP 4x /year
PP 15 days

a ?

left side of a 5.969136
 1675284

IP<PP B^0 10000000
 the same example

ahead p.

but
IP 15days
PP 4x/year

q 0.987591
left side of a 50.90817
 196432.1

after p. B^1 10000000

left side of a 50.27643
 198900.4

eternal pension

B^0 2420443

B^0 2472243

q 0.955109
B^0 164844.4

Realization of the Pension plan

0	1	2	3
3486.852			
1000	1000	1000	1000
2486.852	2735.537		
	1735.537	1909.091	
		909.0909	1000
			0