

Analysis Table 1

May 1991 Case 1: Endowment Mortgage £35,000 Borrowed over 20 Years @ 11.85% p.a. Analysis Table 1

Year	Gross Cash Flow Out	Interest Paid	Premium Paid	Interest Applicable for Tax Relief	Tax Relief on Interest	Tax Relief on Premium	Net Cash Flow Out	→ @ y% Internal Rate of Return				Tax Relief at 29% p.a.	
								@13%	@13.5%	@13.15%	13.158%		
								pv	pv	pv	pv		
1	5103.90	4147.50	956.40	3200.00	928.00	34.67	4141.23	3664.81	3648.66	3659.95	3659.69		
2	5103.90	4147.50	956.40	3200.00	928.00	34.67	4141.23	3243.19	3214.68	3234.60	3234.14		
3	5103.90	4147.50	956.40	3200.00	928.00	34.67	4141.23	2870.08	2832.32	2858.68	2858.07		
4	5103.90	4147.50	956.40	3200.00	928.00	34.67	4141.23	2539.89	2495.43	2526.45	2525.74		
5	5103.90	4147.50	956.40	3200.00	928.00	34.67	4141.23	2247.69	2198.62	2232.83	2232.05		
6	5103.90	4147.50	956.40	3200.00	928.00	34.67	4141.23	1989.11	1937.11	1973.34	1972.50		
7	5103.90	4147.50	956.40	3200.00	928.00	34.67	4141.23	1760.27	1706.70	1744.00	1743.14		
8	5103.90	4147.50	956.40	3200.00	928.00	34.67	4141.23	1557.76	1503.70	1541.32	1540.45		
9	5103.90	4147.50	956.40	3200.00	928.00	34.67	4141.23	1378.55	1324.85	1362.19	1361.33		
10	5103.90	4147.50	956.40	3200.00	928.00	34.67	4141.23	1219.96	1167.27	1203.88	1203.03		
11	5103.90	4147.50	956.40	3200.00	928.00	34.67	4141.23	1079.61	1028.43	1063.97	1063.14		
12	5103.90	4147.50	956.40	3200.00	928.00	34.67	4141.23	955.41	906.11	940.32	939.52		
13	5103.90	4147.50	956.40	3200.00	928.00	34.67	4141.23	845.49	798.33	831.04	830.27		
14	5103.90	4147.50	956.40	3200.00	928.00	34.67	4141.23	748.22	703.38	734.46	733.73		
15	5103.90	4147.50	956.40	3200.00	928.00	34.67	4141.23	662.14	619.71	649.10	648.41		
16	5103.90	4147.50	956.40	3200.00	928.00	34.67	4141.23	585.97	546.00	573.66	573.01		
17	5103.90	4147.50	956.40	3200.00	928.00	34.67	4141.23	518.56	481.06	506.99	506.38		
18	5103.90	4147.50	956.40	3200.00	928.00	34.67	4141.23	458.90	423.84	448.07	447.50		
19	5103.90	4147.50	956.40	3200.00	928.00	34.67	4141.23	406.11	373.43	396.00	395.47		
20	5103.90	4147.50	956.40	3200.00	928.00	34.67	4141.23	359.39	329.01	349.98	349.48		
								PV = $\sum pv \rightarrow$	29,091.11	28,238.64	28,830.83	28,817.05	
								yields FV \rightarrow	335,219.41	355,435.67	341,152.31	341,471.75	
													OK

$$\begin{aligned}
 &FV = P(1 + i)^n \\
 &\quad + £12,770 \\
 &= £35,000 (1.1185)^{20} \\
 &\quad + £12,770 \\
 &\text{i.e. } FV = £341,461.00
 \end{aligned}$$