

# Publication 939

## General Rule for Pensions and Annuities

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# Actuarial Tables

Table I (One Life) applies to all ages. Tables II–IV apply to males ages 35 to 90 and females ages 40 to 95.

Table I.—Ordinary Life Annuities—One Life—Expected Return Multiples

Ages			Multiples	Ages			Multiples	Ages			Multiples
Male	Female	Male		Female	Male	Female					
6	11	65.0	41	46	33.0	76	81	9.1			
7	12	64.1	42	47	32.1	77	82	8.7			
8	13	63.2	43	48	31.2	78	83	8.3			
9	14	62.3	44	49	30.4	79	84	7.8			
10	15	61.4	45	50	29.6	80	85	7.5			
11	16	60.4	46	51	28.7	81	86	7.1			
12	17	59.5	47	52	27.9	82	87	6.7			
13	18	58.6	48	53	27.1	83	88	6.3			
14	19	57.7	49	54	26.3	84	89	6.0			
15	20	56.7	50	55	25.5	85	90	5.7			
16	21	55.8	51	56	24.7	86	91	5.4			
17	22	54.9	52	57	24.0	87	92	5.1			
18	23	53.9	53	58	23.2	88	93	4.8			
19	24	53.0	54	59	22.4	89	94	4.5			
20	25	52.1	55	60	21.7	90	95	4.2			
21	26	51.1	56	61	21.0	91	96	4.0			
22	27	50.2	57	62	20.3	92	97	3.7			
23	28	49.3	58	63	19.6	93	98	3.5			
24	29	48.3	59	64	18.9	94	99	3.3			
25	30	47.4	60	65	18.2	95	100	3.1			
26	31	46.5	61	66	17.5	96	101	2.9			
27	32	45.6	62	67	16.9	97	102	2.7			
28	33	44.6	63	68	16.2	98	103	2.5			
29	34	43.7	64	69	15.6	99	104	2.3			
30	35	42.8	65	70	15.0	100	105	2.1			
31	36	41.9	66	71	14.4	101	106	1.9			
32	37	41.0	67	72	13.8	102	107	1.7			
33	38	40.0	68	73	13.2	103	108	1.5			
34	39	39.1	69	74	12.6	104	109	1.3			
35	40	38.2	70	75	12.1	105	110	1.2			
						106	111	1.0			
36	41	37.3	71	76	11.6	107	112	.8			
37	42	36.5	72	77	11.0	108	113	.7			
38	43	35.6	73	78	10.5	109	114	.6			
39	44	34.7	74	79	10.1	110	115	.5			
40	45	33.8	75	80	9.6	111	116	0			

Adjustments to Tables I, II, V, VI and VIA. Payments Made Quarterly, Semiannually, or Annually

	Number of whole months from annuity starting date to first payment date											
	0–1	2	3	4	5	6	7	8	9	10	11	12
Payments to be made:												
Annually	+.5	+.4	+.3	+.2	+.1	0	0	-.1	-.2	-.3	-.4	-.5
Semiannually	+.2	+.1	0	0	-.1	-.2						
Quarterly	+.1	0	-.1									



Table II.—Ordinary Joint Life and Last Survivor Annuities—Two Lives—Expected Return Multiples

Ages														
Male		35	36	37	38	39	40	41	42	43	44	45	46	47
Male	Female	40	41	42	43	44	45	46	47	48	49	50	51	52
35	40	46.2	45.7	45.3	44.8	44.4	44.0	43.6	43.3	43.0	42.6	42.3	42.0	41.8
36	41	45.7	45.2	44.8	44.3	43.9	43.5	43.1	42.7	42.3	42.0	41.7	41.4	41.1
37	42	45.3	44.8	44.3	43.8	43.4	42.9	42.5	42.1	41.8	41.4	41.1	40.7	40.4
38	43	44.8	44.3	43.8	43.3	42.9	42.4	42.0	41.6	41.2	40.8	40.5	40.1	39.8
39	44	44.4	43.9	43.4	42.9	42.4	41.9	41.5	41.0	40.6	40.2	39.9	39.5	39.2
40	45	44.0	43.5	42.9	42.4	41.9	41.4	41.0	40.5	40.1	39.7	39.3	38.9	38.6
41	46	43.6	43.1	42.5	42.0	41.5	41.0	40.5	40.0	39.6	39.2	38.8	38.4	38.0
42	47	43.3	42.7	42.1	41.6	41.0	40.5	40.0	39.6	39.1	38.7	38.2	37.8	37.5
43	48	43.0	42.3	41.8	41.2	40.6	40.1	39.6	39.1	38.6	38.2	37.7	37.3	36.9
44	49	42.6	42.0	41.4	40.8	40.2	39.7	39.2	38.7	38.2	37.7	37.2	36.8	36.4
45	50	42.3	41.7	41.1	40.5	39.9	39.3	38.8	38.2	37.7	37.2	36.8	36.3	35.9
46	51	42.0	41.4	40.7	40.1	39.5	38.9	38.4	37.8	37.3	36.8	36.3	35.9	35.4
47	52	41.8	41.1	40.4	39.8	39.2	38.6	38.0	37.5	36.9	36.4	35.9	35.4	35.0

Ages														
Male		48	49	50	51	52	53	54	55	56	57	58	59	60
Male	Female	53	54	55	56	57	58	59	60	61	62	63	64	65
35	40	41.5	41.3	41.0	40.8	40.6	40.4	40.3	40.1	40.0	39.8	39.7	39.6	39.5
36	41	40.8	40.6	40.3	40.1	39.9	39.7	39.5	39.3	39.2	39.0	38.9	38.8	38.6
37	42	40.2	39.9	39.6	39.4	39.2	39.0	38.8	38.6	38.4	38.3	38.1	38.0	37.9
38	43	39.5	39.2	39.0	38.7	38.5	38.3	38.1	37.9	37.7	37.5	37.3	37.2	37.1
39	44	38.9	38.6	38.3	38.0	37.8	37.6	37.3	37.1	36.9	36.8	36.6	36.4	36.3
40	45	38.3	38.0	37.7	37.4	37.1	36.9	36.6	36.4	36.2	36.0	35.9	35.7	35.5
41	46	37.7	37.3	37.0	36.7	36.5	36.2	36.0	35.7	35.5	35.3	35.1	35.0	34.8
42	47	37.1	36.8	36.4	36.1	35.8	35.6	35.3	35.1	34.8	34.6	34.4	34.2	34.1
43	48	36.5	36.2	35.8	35.5	35.2	34.9	34.7	34.4	34.2	33.9	33.7	33.5	33.3
44	49	36.0	35.6	35.3	34.9	34.6	34.3	34.0	33.8	33.5	33.3	33.0	32.8	32.6
45	50	35.5	35.1	34.7	34.4	34.0	33.7	33.4	33.1	32.9	32.6	32.4	32.2	31.9
46	51	35.0	34.6	34.2	33.8	33.5	33.1	32.8	32.5	32.2	32.0	31.7	31.5	31.3
47	52	34.5	34.1	33.7	33.3	32.9	32.6	32.2	31.9	31.6	31.4	31.1	30.9	30.6
48	53	34.0	33.6	33.2	32.8	32.4	32.0	31.7	31.4	31.1	30.8	30.5	30.2	30.0
49	54	33.6	33.1	32.7	32.3	31.9	31.5	31.2	30.8	30.5	30.2	29.9	29.6	29.4
50	55	33.2	32.7	32.3	31.8	31.4	31.0	30.6	30.3	29.9	29.6	29.3	29.0	28.8
51	56	32.8	32.3	31.8	31.4	30.9	30.5	30.1	29.8	29.4	29.1	28.8	28.5	28.2
52	57	32.4	31.9	31.4	30.9	30.5	30.1	29.7	29.3	28.9	28.6	28.2	27.9	27.6
53	58	32.0	31.5	31.0	30.5	30.1	29.6	29.2	28.8	28.4	28.1	27.7	27.4	27.1
54	59	31.7	31.2	30.6	30.1	29.7	29.2	28.8	28.3	27.9	27.6	27.2	26.9	26.5
55	60	31.4	30.8	30.3	29.8	29.3	28.8	28.3	27.9	27.5	27.1	26.7	26.4	26.0
56	61	31.1	30.5	29.9	29.4	28.9	28.4	27.9	27.5	27.1	26.7	26.3	25.9	25.5
57	62	30.8	30.2	29.6	29.1	28.6	28.1	27.6	27.1	26.7	26.2	25.8	25.4	25.1
58	63	30.5	29.9	29.3	28.8	28.2	27.7	27.2	26.7	26.3	25.8	25.4	25.0	24.6
59	64	30.2	29.6	29.0	28.5	27.9	27.4	26.9	26.4	25.9	25.4	25.0	24.6	24.2
60	65	30.0	29.4	28.8	28.2	27.6	27.1	26.5	26.0	25.5	25.1	24.6	24.2	23.8



Table II.—Ordinary Joint Life and Last Survivor Annuities—Two Lives—Expected Return Multiples—Continued

Ages														
Male		61	62	63	64	65	66	67	68	69	70	71	72	73
Male	Female	66	67	68	69	70	71	72	73	74	75	76	77	78
35	40	39.4	39.3	39.2	39.1	39.0	38.9	38.9	38.8	38.8	38.7	38.7	38.6	38.6
36	41	38.5	38.4	38.3	38.2	38.2	38.1	38.0	38.0	37.9	37.9	37.8	37.8	37.7
37	42	37.7	37.6	37.5	37.4	37.3	37.3	37.2	37.1	37.1	37.0	36.9	36.9	36.9
38	43	36.9	36.8	36.7	36.6	36.5	36.4	36.4	36.3	36.2	36.2	36.1	36.0	36.0
39	44	36.2	36.0	35.9	35.8	35.7	35.6	35.5	35.5	35.4	35.3	35.3	35.2	35.2
40	45	35.4	35.3	35.1	35.0	34.9	34.8	34.7	34.6	34.6	34.5	34.4	34.4	34.3
41	46	34.6	34.5	34.4	34.2	34.1	34.0	33.9	33.8	33.8	33.7	33.6	33.5	33.5
42	47	33.9	33.7	33.6	33.5	33.4	33.2	33.1	33.0	33.0	32.9	32.8	32.7	32.7
43	48	33.2	33.0	32.9	32.7	32.6	32.5	32.4	32.3	32.2	32.1	32.0	31.9	31.9
44	49	32.5	32.3	32.1	32.0	31.8	31.7	31.6	31.5	31.4	31.3	31.2	31.1	31.1
45	50	31.8	31.6	31.4	31.3	31.1	31.0	30.8	30.7	30.6	30.5	30.4	30.4	30.3
46	51	31.1	30.9	30.7	30.5	30.4	30.2	30.1	30.0	29.9	29.8	29.7	29.6	29.5
47	52	30.4	30.2	30.0	29.8	29.7	29.5	29.4	29.3	29.1	29.0	28.9	28.8	28.7
48	53	29.8	29.5	29.3	29.2	29.0	28.8	28.7	28.5	28.4	28.3	28.2	28.1	28.0
49	54	29.1	28.9	28.7	28.5	28.3	28.1	28.0	27.8	27.7	27.6	27.5	27.4	27.3
50	55	28.5	28.3	28.1	27.8	27.6	27.5	27.3	27.1	27.0	26.9	26.7	26.6	26.5
51	56	27.9	27.7	27.4	27.2	27.0	26.8	26.6	26.5	26.3	26.2	26.0	25.9	25.8
52	57	27.3	27.1	26.8	26.6	26.4	26.2	26.0	25.8	25.7	25.5	25.4	25.2	25.1
53	58	26.8	26.5	26.2	26.0	25.8	25.6	25.4	25.2	25.0	24.8	24.7	24.6	24.4
54	59	26.2	25.9	25.7	25.4	25.2	25.0	24.7	24.6	24.4	24.2	24.0	23.9	23.8
55	60	25.7	25.4	25.1	24.9	24.6	24.4	24.1	23.9	23.8	23.6	23.4	23.3	23.1
56	61	25.2	24.9	24.6	24.3	24.1	23.8	23.6	23.4	23.2	23.0	22.8	22.6	22.5
57	62	24.7	24.4	24.1	23.8	23.5	23.3	23.0	22.8	22.6	22.4	22.2	22.0	21.9
58	63	24.3	23.9	23.6	23.3	23.0	22.7	22.5	22.2	22.0	21.8	21.6	21.4	21.3
59	64	23.8	23.5	23.1	22.8	22.5	22.2	21.9	21.7	21.5	21.2	21.0	20.9	20.7
60	65	23.4	23.0	22.7	22.3	22.0	21.7	21.4	21.2	20.9	20.7	20.5	20.3	20.1
61	66	23.0	22.6	22.2	21.9	21.6	21.3	21.0	20.7	20.4	20.2	20.0	19.8	19.6
62	67	22.6	22.2	21.8	21.5	21.1	20.8	20.5	20.2	19.9	19.7	19.5	19.2	19.0
63	68	22.2	21.8	21.4	21.1	20.7	20.4	20.1	19.8	19.5	19.2	19.0	18.7	18.5
64	69	21.9	21.5	21.1	20.7	20.3	20.0	19.6	19.3	19.0	18.7	18.5	18.2	18.0
65	70	21.6	21.1	20.7	20.3	19.9	19.6	19.2	18.9	18.6	18.3	18.0	17.8	17.5
66	71	21.3	20.8	20.4	20.0	19.6	19.2	18.8	18.5	18.2	17.9	17.6	17.3	17.1
67	72	21.0	20.5	20.1	19.6	19.2	18.8	18.5	18.1	17.8	17.5	17.2	16.9	16.7
68	73	20.7	20.2	19.8	19.3	18.9	18.5	18.1	17.8	17.4	17.1	16.8	16.5	16.2
69	74	20.4	19.9	19.5	19.0	18.6	18.2	17.8	17.4	17.1	16.7	16.4	16.1	15.8
70	75	20.2	19.7	19.2	18.7	18.3	17.9	17.5	17.1	16.7	16.4	16.1	15.8	15.5
71	76	20.0	19.5	19.0	18.5	18.0	17.6	17.2	16.8	16.4	16.1	15.7	15.4	15.1
72	77	19.8	19.2	18.7	18.2	17.8	17.3	16.9	16.5	16.1	15.8	15.4	15.1	14.8
73	78	19.6	19.0	18.5	18.0	17.5	17.1	16.7	16.2	15.8	15.5	15.1	14.8	14.4



Table II.—Ordinary Joint Life and Last Survivor Annuities—Two Lives—Expected Return Multiples—Continued

Ages													
Male		74	75	76	77	78	79	80	81	82	83	84	85
Male	Female	79	80	81	82	83	84	85	86	87	88	89	90
35	40	38.6	38.5	38.5	38.5	38.4	38.4	38.4	38.4	38.4	38.4	38.3	38.3
36	41	37.7	37.6	37.6	37.6	37.6	37.5	37.5	37.5	37.5	37.5	37.5	37.4
37	42	36.8	36.8	36.7	36.7	36.7	36.7	36.6	36.6	36.6	36.6	36.6	36.6
38	43	36.0	35.9	35.9	35.9	35.8	35.8	35.8	35.8	35.7	35.7	35.7	35.7
39	44	35.1	35.1	35.0	35.0	35.0	34.9	34.9	34.9	34.9	34.8	34.8	34.8
40	45	34.3	34.2	34.2	34.1	34.1	34.1	34.1	34.0	34.0	34.0	34.0	34.0
41	46	33.4	33.4	33.3	33.3	33.3	33.2	33.2	33.2	33.2	33.1	33.1	33.1
42	47	32.6	32.6	32.5	32.5	32.4	32.4	32.4	32.3	32.3	32.3	32.3	32.3
43	48	31.8	31.8	31.7	31.7	31.6	31.6	31.5	31.5	31.5	31.5	31.4	31.4
44	49	31.0	30.9	30.9	30.8	30.8	30.8	30.7	30.7	30.7	30.6	30.6	30.6
45	50	30.2	30.1	30.1	30.0	30.0	29.9	29.9	29.9	29.8	29.8	29.8	29.8
46	51	29.4	29.4	29.3	29.2	29.2	29.2	29.1	29.1	29.0	29.0	29.0	28.9
47	52	28.7	28.6	28.5	28.5	28.4	28.4	28.3	28.3	28.2	28.2	28.2	28.1
48	53	27.9	27.8	27.8	27.7	27.6	27.6	27.5	27.5	27.5	27.4	27.4	27.4
49	54	27.2	27.1	27.0	26.9	26.9	26.8	26.8	26.7	26.7	26.6	26.6	26.6
50	55	26.4	26.3	26.3	26.2	26.1	26.1	26.0	26.0	25.9	25.9	25.8	25.8
51	56	25.7	25.6	25.5	25.5	25.4	25.3	25.3	25.2	25.2	25.1	25.1	25.0
52	57	25.0	24.9	24.8	24.7	24.7	24.6	24.5	24.5	24.4	24.4	24.3	24.3
53	58	24.3	24.2	24.1	24.0	23.9	23.9	23.8	23.7	23.7	23.6	23.6	23.5
54	59	23.6	23.5	23.4	23.3	23.2	23.2	23.1	23.0	23.0	22.9	22.9	22.8
55	60	23.0	22.9	22.8	22.7	22.6	22.5	22.4	22.3	22.3	22.2	22.2	22.1
56	61	22.3	22.2	22.1	22.0	21.9	21.8	21.7	21.6	21.6	21.5	21.5	21.4
57	62	21.7	21.6	21.5	21.3	21.2	21.1	21.1	21.0	20.9	20.8	20.8	20.7
58	63	21.1	21.0	20.8	20.7	20.6	20.5	20.4	20.3	20.2	20.2	20.1	20.0
59	64	20.5	20.4	20.2	20.1	20.0	19.9	19.8	19.7	19.6	19.5	19.4	19.4
60	65	19.9	19.8	19.6	19.5	19.4	19.3	19.1	19.0	19.0	18.9	18.8	18.7
61	66	19.4	19.2	19.1	18.9	18.8	18.7	18.5	18.4	18.3	18.3	18.2	18.1
62	67	18.8	18.7	18.5	18.3	18.2	18.1	18.0	17.8	17.7	17.7	17.6	17.5
63	68	18.3	18.1	18.0	17.8	17.6	17.5	17.4	17.3	17.2	17.1	17.0	16.9
64	69	17.8	17.6	17.4	17.3	17.1	17.0	16.8	16.7	16.6	16.5	16.4	16.3
65	70	17.3	17.1	16.9	16.7	16.6	16.4	16.3	16.2	16.0	15.9	15.8	15.8
66	71	16.9	16.6	16.4	16.3	16.1	15.9	15.8	15.6	15.5	15.4	15.3	15.2
67	72	16.4	16.2	16.0	15.8	15.6	15.4	15.3	15.1	15.0	14.9	14.8	14.7
68	73	16.0	15.7	15.5	15.3	15.1	15.0	14.8	14.6	14.5	14.4	14.3	14.2
69	74	15.6	15.3	15.1	14.9	14.7	14.5	14.3	14.2	14.0	13.9	13.8	13.7
70	75	15.2	14.9	14.7	14.5	14.3	14.1	13.9	13.7	13.6	13.4	13.3	13.2
71	76	14.8	14.5	14.3	14.1	13.8	13.6	13.5	13.3	13.1	13.0	12.8	12.7
72	77	14.5	14.2	13.9	13.7	13.5	13.2	13.0	12.9	12.7	12.5	12.4	12.3
73	78	14.1	13.8	13.6	13.3	13.1	12.9	12.7	12.5	12.3	12.1	12.0	11.8
74	79	13.8	13.5	13.2	13.0	12.7	12.5	12.3	12.1	11.9	11.7	11.6	11.4
75	80	13.5	13.2	12.9	12.6	12.4	12.2	11.9	11.7	11.5	11.4	11.2	11.0
76	81	13.2	12.9	12.6	12.3	12.1	11.8	11.6	11.4	11.2	11.0	10.8	10.7
77	82	13.0	12.6	12.3	12.1	11.8	11.5	11.3	11.1	10.8	10.7	10.5	10.3
78	83	12.7	12.4	12.1	11.8	11.5	11.2	11.0	10.7	10.5	10.3	10.1	10.0
79	84	12.5	12.2	11.8	11.5	11.2	11.0	10.7	10.5	10.2	10.0	9.8	9.6
80	85	12.3	11.9	11.6	11.3	11.0	10.7	10.4	10.2	10.0	9.7	9.5	9.3
81	86	12.1	11.7	11.4	11.1	10.7	10.5	10.2	9.9	9.7	9.5	9.3	9.1
82	87	11.9	11.5	11.2	10.8	10.5	10.2	10.0	9.7	9.4	9.2	9.0	8.8
83	88	11.7	11.4	11.0	10.7	10.3	10.0	9.7	9.5	9.2	9.0	8.7	8.5
84	89	11.6	11.2	10.8	10.5	10.0	9.8	9.5	9.3	9.0	8.7	8.5	8.3
85	90	11.4	11.0	10.7	10.3	10.0	9.6	9.3	9.1	8.8	8.5	8.3	8.1



Table II.—Ordinary Joint Life and Last Survivor Annuities— Two Lives—  
Expected Return Multiples—Continued

Ages		86	87	88	89	90
Male						
Male	Female	91	92	93	94	95
35	40	38.3	38.3	38.3	38.3	38.3
36	41	37.4	37.4	37.4	37.4	37.4
37	42	36.5	36.5	36.5	36.5	36.5
38	43	35.7	35.7	35.6	35.6	35.6
39	44	34.8	34.8	34.8	34.8	34.8
40	45	33.9	33.9	33.9	33.9	33.9
41	46	33.1	33.1	33.1	33.0	33.0
42	47	32.2	32.2	32.2	32.2	32.2
43	48	31.4	31.4	31.4	31.4	31.3
44	49	30.6	30.5	30.5	30.5	30.5
45	50	29.7	29.7	29.7	29.7	29.7
46	51	28.9	28.9	28.9	28.9	28.9
47	52	28.1	28.1	28.1	28.1	28.0
48	53	27.3	27.3	27.3	27.3	27.2
49	54	26.5	26.5	26.5	26.5	26.5
50	55	25.8	25.7	25.7	25.7	25.7
51	56	25.0	25.0	24.9	24.9	24.9
52	57	24.3	24.2	24.2	24.2	24.1
53	58	23.5	23.5	23.4	23.4	23.4
54	59	22.8	22.7	22.7	22.7	22.7
55	60	22.1	22.0	22.0	22.0	21.9
56	61	21.4	21.3	21.3	21.3	21.2
57	62	20.7	20.6	20.6	20.6	20.5
58	63	20.0	19.9	19.9	19.9	19.8
59	64	19.3	19.3	19.2	19.2	19.2
60	65	18.7	18.6	18.6	18.5	18.5
61	66	18.1	18.0	17.9	17.9	17.9
62	67	17.4	17.4	17.3	17.3	17.2
63	68	16.8	16.8	16.7	16.7	16.6
64	69	16.2	16.2	16.1	16.1	16.0
65	70	15.7	15.6	15.5	15.5	15.4
66	71	15.1	15.0	15.0	14.9	14.8
67	72	14.6	14.5	14.4	14.4	14.3
68	73	14.1	14.0	13.9	13.8	13.8
69	74	13.6	13.5	13.4	13.3	13.2
70	75	13.1	13.0	12.9	12.8	12.7
71	76	12.6	12.5	12.4	12.3	12.2
72	77	12.1	12.0	11.9	11.8	11.8
73	78	11.7	11.6	11.5	11.4	11.3
74	79	11.3	11.2	11.1	11.0	10.9
75	80	10.9	10.8	10.7	10.5	10.5
76	81	10.5	10.4	10.3	10.2	10.1
77	82	10.2	10.0	9.9	9.8	9.7
78	83	9.8	9.7	9.5	9.4	9.3
79	84	9.5	9.3	9.2	9.1	8.9
80	85	9.2	9.0	8.9	8.7	8.6
81	86	8.9	8.7	8.6	8.4	8.3
82	87	8.6	8.4	8.3	8.1	8.0
83	88	8.3	8.2	8.0	7.9	7.7
84	89	8.1	7.9	7.8	7.6	7.5
85	90	7.9	7.7	7.5	7.4	7.2
86	91	7.7	7.5	7.3	7.1	7.0
87	92	7.5	7.3	7.1	6.9	6.8
88	93	7.3	7.1	6.9	6.7	6.6
89	94	7.1	6.9	6.7	6.5	6.4
90	95	7.0	6.8	6.6	6.4	6.2

Table III.—Percent Value of Refund Feature

Ages		Duration of guaranteed amount												
Male	Female	1 year	2 years	3 years	4 years	5 years	6 years	7 years	8 years	9 years	10 years	11 years	12 years	13 years
		Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent
35	40	—	—	—	1	1	1	1	1	2	2	2	2	2
36	41	—	—	—	1	1	1	1	1	2	2	2	2	3
37	42	—	—	1	1	1	1	1	2	2	2	2	3	3
38	43	—	—	1	1	1	1	1	2	2	2	2	3	3
39	44	—	—	1	1	1	1	2	2	2	2	3	3	3
40	45	—	—	1	1	1	1	2	2	2	3	3	3	4
41	46	—	—	1	1	1	1	2	2	2	3	3	3	4
42	47	—	—	1	1	1	2	2	2	3	3	3	4	4
43	48	—	1	1	1	1	2	2	2	3	3	4	4	4
44	49	—	1	1	1	1	2	2	3	3	3	4	4	5
45	50	—	1	1	1	2	2	2	3	3	4	4	5	5
46	51	—	1	1	1	2	2	3	3	3	4	4	5	5
47	52	—	1	1	1	2	2	3	3	4	4	5	5	6
48	53	—	1	1	2	2	2	3	3	4	5	5	6	6
49	54	—	1	1	2	2	3	3	4	4	5	5	6	7
50	55	—	1	1	2	2	3	3	4	5	5	6	7	7
51	56	—	1	1	2	3	3	4	4	5	6	6	7	8
52	57	1	1	2	2	3	3	4	5	5	6	7	8	8
53	58	1	1	2	2	3	4	4	5	6	7	7	8	9
54	59	1	1	2	2	3	4	5	5	6	7	8	9	10
55	60	1	1	2	3	3	4	5	6	7	8	8	9	10
56	61	1	1	2	3	4	4	5	6	7	8	9	10	11
57	62	1	1	2	3	4	5	6	7	8	9	10	11	12
58	63	1	2	2	3	4	5	6	7	8	9	10	12	13
59	64	1	2	3	4	5	6	7	8	9	10	11	12	14
60	65	1	2	3	4	5	6	7	8	10	11	12	13	15
61	66	1	2	3	4	5	6	8	9	10	12	13	14	16
62	67	1	2	3	4	6	7	8	10	11	12	14	15	17
63	68	1	2	4	5	6	7	9	10	12	13	15	16	18
64	69	1	3	4	5	7	8	9	11	13	14	16	17	19
65	70	1	3	4	6	7	9	10	12	13	15	17	19	20
66	71	1	3	4	6	8	9	11	13	14	16	18	20	22
67	72	2	3	5	6	8	10	12	14	15	17	19	21	23
68	73	2	3	5	7	9	11	13	14	16	18	21	23	25
69	74	2	4	6	7	9	11	13	16	18	20	22	24	26
70	75	2	4	6	8	10	12	14	17	19	21	23	26	28
71	76	2	4	6	9	11	13	15	18	20	22	25	27	29
72	77	2	5	7	9	12	14	16	19	21	24	26	29	31
73	78	2	5	7	10	12	15	18	20	23	25	28	30	33
74	79	3	5	8	11	13	16	19	22	24	27	30	32	35
75	80	3	6	8	11	14	17	20	23	26	29	31	34	37
76	81	3	6	9	12	15	18	21	24	27	30	33	36	39
77	82	3	7	10	13	16	20	23	26	29	32	35	38	41
78	83	4	7	11	14	17	21	24	28	31	34	37	40	43
79	84	4	8	11	15	19	22	26	29	33	36	39	42	45
80	85	4	8	12	16	20	24	27	31	34	38	41	44	47
81	86	4	9	13	17	21	25	29	33	36	40	43	46	49
82	87	5	9	14	18	23	27	31	35	38	42	45	48	51
83	88	5	10	15	19	24	28	33	37	40	44	47	50	53
84	89	5	11	16	21	26	30	34	38	42	46	49	52	55
85	90	6	11	17	22	27	32	36	41	44	48	51	55	57
86	91	6	12	18	24	29	34	38	43	47	50	54	57	59
87	92	7	13	19	25	31	36	40	45	49	52	56	59	61
88	93	7	14	21	27	32	38	42	47	51	55	58	61	63
89	94	8	15	22	28	34	40	45	49	53	57	60	63	65
90	95	8	16	23	30	36	42	47	51	55	59	62	65	67



Table III.—Percent Value of Refund Feature—Continued

Ages		Duration of guaranteed amount											
Male	Female	14 years	15 years	16 years	17 years	18 years	19 years	20 years	21 years	22 years	23 years	24 years	25 years
		<i>Percent</i>	<i>Percent</i>	<i>Percent</i>	<i>Percent</i>	<i>Percent</i>	<i>Percent</i>	<i>Percent</i>	<i>Percent</i>	<i>Percent</i>	<i>Percent</i>	<i>Percent</i>	<i>Percent</i>
35	40	3	3	3	4	4	4	5	5	5	6	6	7
36	41	3	3	4	4	4	5	5	5	6	6	7	7
37	42	3	3	4	4	4	5	5	6	6	7	7	8
38	43	3	4	4	4	5	5	6	6	7	7	8	8
39	44	4	4	4	5	5	6	6	7	7	8	8	9
40	45	4	4	5	5	6	6	7	7	8	8	9	9
41	46	4	5	5	6	6	7	7	8	8	9	9	10
42	47	5	5	5	6	6	7	8	8	9	9	10	11
43	48	5	5	6	6	7	8	8	9	9	10	11	12
44	49	5	6	6	7	7	8	9	9	10	11	12	12
45	50	6	6	7	7	8	9	9	10	11	12	12	13
46	51	6	7	7	8	9	9	10	11	12	12	13	14
47	52	7	7	8	9	9	10	11	12	12	13	14	15
48	53	7	8	8	9	10	11	12	12	13	14	15	16
49	54	8	8	9	10	11	11	12	13	14	15	16	17
50	55	8	9	10	11	11	12	13	14	15	16	17	18
51	56	9	10	10	11	12	13	14	15	16	17	18	20
52	57	9	10	11	12	13	14	15	16	17	18	20	21
53	58	10	11	12	13	14	15	16	17	19	20	21	22
54	59	11	12	13	14	15	16	17	18	20	21	22	24
55	60	11	13	14	15	16	17	18	20	21	22	24	25
56	61	12	13	15	16	17	18	20	21	22	24	25	27
57	62	13	14	16	17	18	20	21	22	24	25	27	28
58	63	14	15	17	18	19	21	22	24	25	27	28	30
59	64	15	16	18	19	21	22	24	25	27	28	30	31
60	65	16	18	19	20	22	24	25	27	28	30	32	33
61	66	17	19	20	22	23	25	27	28	30	32	33	35
62	67	18	20	22	23	25	27	28	30	32	33	35	37
63	68	20	21	23	25	26	28	30	32	33	35	37	39
64	69	21	23	24	26	28	30	32	33	35	37	39	41
65	70	22	24	26	28	30	32	33	35	37	39	41	42
66	71	24	26	28	29	31	33	35	37	39	41	43	44
67	72	25	27	29	31	33	35	37	39	41	43	45	46
68	73	27	29	31	33	35	37	39	41	43	45	47	48
69	74	28	30	33	35	37	39	41	43	45	47	48	50
70	75	30	32	34	37	39	41	43	45	47	49	50	52
71	76	32	34	36	39	41	43	45	47	49	51	52	54
72	77	34	36	38	41	43	45	47	49	51	53	54	56
73	78	35	38	40	43	45	47	49	51	53	55	56	58
74	79	37	40	42	45	47	49	51	53	55	57	58	60
75	80	39	42	44	47	49	51	53	55	57	58	60	62
76	81	41	44	46	49	51	53	55	57	59	60	62	63
77	82	43	46	48	51	53	55	57	59	61	62	64	65
78	83	45	48	50	53	55	57	59	61	62	64	65	67
79	84	48	50	53	55	57	59	61	63	64	66	67	68
80	85	50	52	55	57	59	61	63	64	66	67	69	70
81	86	52	54	57	59	61	63	65	66	68	69	70	72
82	87	54	56	59	61	63	65	66	68	69	71	72	73
83	88	56	58	61	63	65	66	68	70	71	72	73	74
84	89	58	60	63	65	67	68	70	71	73	74	75	76
85	90	60	62	65	67	68	70	71	73	74	75	76	77
86	91	62	64	66	68	70	72	73	74	75	76	77	—
87	92	64	66	68	70	72	73	74	76	77	78	—	—
88	93	66	68	70	72	73	75	76	77	78	—	—	—
89	94	68	70	72	73	75	76	77	78	—	—	—	—
90	95	70	72	73	75	76	77	79	—	—	—	—	—

Table IV.—Temporary Life Annuities<sup>1</sup>—One Life—Expected Return Multiples

Ages		Temporary period—maximum duration of annuity									
Male	Female	Years									
		1	2	3	4	5	6	7	8	9	10
0 to 8	0 to 13	1.0	2.0	3.0	4.0	5.0	6.0	7.0	8.0	8.9	9.9
9	14	1.0	2.0	3.0	4.0	5.0	6.0	7.0	8.0	8.9	9.9
10	15	1.0	2.0	3.0	4.0	5.0	6.0	7.0	8.0	8.9	9.9
11	16	1.0	2.0	3.0	4.0	5.0	6.0	7.0	8.0	8.9	9.9
12	17	1.0	2.0	3.0	4.0	5.0	6.0	7.0	8.0	8.9	9.9
13	18	1.0	2.0	3.0	4.0	5.0	6.0	7.0	8.0	8.9	9.9
14	19	1.0	2.0	3.0	4.0	5.0	6.0	7.0	8.0	8.9	9.9
15	20	1.0	2.0	3.0	4.0	5.0	6.0	7.0	8.0	8.9	9.9
16	21	1.0	2.0	3.0	4.0	5.0	6.0	7.0	8.0	8.9	9.9
17	22	1.0	2.0	3.0	4.0	5.0	6.0	7.0	8.0	8.9	9.9
18	23	1.0	2.0	3.0	4.0	5.0	6.0	7.0	8.0	8.9	9.9
19	24	1.0	2.0	3.0	4.0	5.0	6.0	7.0	8.0	8.9	9.9
20	25	1.0	2.0	3.0	4.0	5.0	6.0	7.0	8.0	8.9	9.9
21	26	1.0	2.0	3.0	4.0	5.0	6.0	7.0	8.0	8.9	9.9
22	27	1.0	2.0	3.0	4.0	5.0	6.0	7.0	8.0	8.9	9.9
23	28	1.0	2.0	3.0	4.0	5.0	6.0	7.0	8.0	8.9	9.9
24	29	1.0	2.0	3.0	4.0	5.0	6.0	7.0	7.9	8.9	9.9
25	30	1.0	2.0	3.0	4.0	5.0	6.0	7.0	7.9	8.9	9.9
26	31	1.0	2.0	3.0	4.0	5.0	6.0	7.0	7.9	8.9	9.9
27	32	1.0	2.0	3.0	4.0	5.0	6.0	7.0	7.9	8.9	9.9
28	33	1.0	2.0	3.0	4.0	5.0	6.0	7.0	7.9	8.9	9.9
29	34	1.0	2.0	3.0	4.0	5.0	6.0	6.9	7.9	8.9	9.9
30	35	1.0	2.0	3.0	4.0	5.0	6.0	6.9	7.9	8.9	9.9
31	36	1.0	2.0	3.0	4.0	5.0	6.0	6.9	7.9	8.9	9.9
32	37	1.0	2.0	3.0	4.0	5.0	6.0	6.9	7.9	8.9	9.9
33	38	1.0	2.0	3.0	4.0	5.0	6.0	6.9	7.9	8.9	9.9
34	39	1.0	2.0	3.0	4.0	5.0	5.9	6.9	7.9	8.9	9.8
35	40	1.0	2.0	3.0	4.0	5.0	5.9	6.9	7.9	8.9	9.8
36	41	1.0	2.0	3.0	4.0	5.0	5.9	6.9	7.9	8.9	9.8
37	42	1.0	2.0	3.0	4.0	5.0	5.9	6.9	7.9	8.8	9.8
38	43	1.0	2.0	3.0	4.0	5.0	5.9	6.9	7.9	8.8	9.8
39	44	1.0	2.0	3.0	4.0	4.9	5.9	6.9	7.9	8.8	9.8
40	45	1.0	2.0	3.0	4.0	4.9	5.9	6.9	7.8	8.8	9.7
41	46	1.0	2.0	3.0	4.0	4.9	5.9	6.9	7.8	8.8	9.7
42	47	1.0	2.0	3.0	4.0	4.9	5.9	6.9	7.8	8.8	9.7
43	48	1.0	2.0	3.0	4.0	4.9	5.9	6.9	7.8	8.8	9.7
44	49	1.0	2.0	3.0	4.0	4.9	5.9	6.8	7.8	8.7	9.7
45	50	1.0	2.0	3.0	3.9	4.9	5.9	6.8	7.8	8.7	9.6
46	51	1.0	2.0	3.0	3.9	4.9	5.9	6.8	7.8	8.7	9.6
47	52	1.0	2.0	3.0	3.9	4.9	5.9	6.8	7.7	8.7	9.6
48	53	1.0	2.0	3.0	3.9	4.9	5.9	6.8	7.7	8.6	9.5
49	54	1.0	2.0	3.0	3.9	4.9	5.8	6.8	7.7	8.6	9.5
50	55	1.0	2.0	3.0	3.9	4.9	5.8	6.8	7.7	8.6	9.5
51	56	1.0	2.0	3.0	3.9	4.9	5.8	6.7	7.7	8.6	9.4
52	57	1.0	2.0	3.0	3.9	4.9	5.8	6.7	7.6	8.5	9.4
53	58	1.0	2.0	2.9	3.9	4.9	5.8	6.7	7.6	8.5	9.3
54	59	1.0	2.0	2.9	3.9	4.8	5.8	6.7	7.6	8.4	9.3
55	60	1.0	2.0	2.9	3.9	4.8	5.8	6.7	7.5	8.4	9.2
56	61	1.0	2.0	2.9	3.9	4.8	5.7	6.6	7.5	8.4	9.2
57	62	1.0	2.0	2.9	3.9	4.8	5.7	6.6	7.5	8.3	9.1



Table IV.—Temporary Life Annuities<sup>1</sup>—One Life—Expected Return Multiples—Continued

Ages		Temporary period—maximum duration of annuity									
Male	Female	Years									
		1	2	3	4	5	6	7	8	9	10
58	63	1.0	2.0	2.9	3.9	4.8	5.7	6.6	7.4	8.3	9.1
59	64	1.0	2.0	2.9	3.9	4.8	5.7	6.5	7.4	8.2	9.0
60	65	1.0	2.0	2.9	3.8	4.8	5.6	6.5	7.3	8.1	8.9
61	66	1.0	2.0	2.9	3.8	4.7	5.6	6.5	7.3	8.1	8.8
62	67	1.0	2.0	2.9	3.8	4.7	5.6	6.4	7.2	8.0	8.8
63	68	1.0	2.0	2.9	3.8	4.7	5.6	6.4	7.2	7.9	8.7
64	69	1.0	1.9	2.9	3.8	4.7	5.5	6.3	7.1	7.9	8.6
65	70	1.0	1.9	2.9	3.8	4.6	5.5	6.3	7.1	7.8	8.5
66	71	1.0	1.9	2.9	3.8	4.6	5.4	6.2	7.0	7.7	8.4
67	72	1.0	1.9	2.9	3.7	4.6	5.4	6.2	6.9	7.6	8.3
68	73	1.0	1.9	2.8	3.7	4.6	5.4	6.1	6.8	7.5	8.2
69	74	1.0	1.9	2.8	3.7	4.5	5.3	6.1	6.8	7.4	8.0
70	75	1.0	1.9	2.8	3.7	4.5	5.3	6.0	6.7	7.3	7.9
71	76	1.0	1.9	2.8	3.7	4.5	5.2	5.9	6.5	7.2	7.8
72	77	1.0	1.9	2.8	3.6	4.4	5.2	5.8	6.5	7.1	7.6
73	78	1.0	1.9	2.8	3.6	4.4	5.1	5.8	6.4	7.0	7.5
74	79	1.0	1.9	2.8	3.6	4.3	5.0	5.7	6.3	6.8	7.3
75	80	1.0	1.9	2.7	3.5	4.3	5.0	5.6	6.2	6.7	7.1
76	81	1.0	1.9	2.7	3.5	4.2	4.9	5.5	6.1	6.5	7.0
77	82	1.0	1.9	2.7	3.5	4.2	4.8	5.4	5.9	6.4	6.8
78	83	1.0	1.9	2.7	3.4	4.1	4.7	5.3	5.8	6.2	6.6
79	84	1.0	1.8	2.7	3.4	4.1	4.7	5.2	5.7	6.1	6.4
80	85	1.0	1.8	2.6	3.4	4.0	4.6	5.1	5.5	5.9	6.2
81	86	1.0	1.8	2.6	3.3	3.9	4.5	5.0	5.4	5.7	6.0
82	87	1.0	1.8	2.6	3.3	3.9	4.4	4.8	5.2	5.6	5.8
83	88	.9	1.8	2.6	3.2	3.8	4.3	4.7	5.1	5.4	5.6
84	89	.9	1.8	2.5	3.2	3.7	4.2	4.6	4.9	5.2	5.4
85	90	.9	1.8	2.5	3.1	3.6	4.1	4.5	4.8	5.0	5.2
86	91	.9	1.8	2.5	3.1	3.6	4.0	4.3	4.6	4.8	5.0

Ages		Temporary period—maximum duration of annuity									
Male	Female	Years									
		11	12	13	14	15	16	17	18	19	20
0 to 8	0 to 13	10.9	11.9	12.9	13.9	14.9	15.8	16.8	17.8	18.8	19.7
9	14	10.9	11.9	12.9	13.9	14.9	15.8	16.8	17.8	18.8	19.7
10	15	10.9	11.9	12.9	13.9	14.9	15.8	16.8	17.8	18.8	19.7
11	16	10.9	11.9	12.9	13.9	14.9	15.8	16.8	17.8	18.8	19.7
12	17	10.9	11.9	12.9	13.9	14.9	15.8	16.8	17.8	18.8	19.7
13	18	10.9	11.9	12.9	13.9	14.9	15.8	16.8	17.8	18.8	19.7
14	19	10.9	11.9	12.9	13.9	14.9	15.8	16.8	17.8	18.8	19.7
15	20	10.9	11.9	12.9	13.9	14.9	15.8	16.8	17.8	18.7	19.7
16	21	10.9	11.9	12.9	13.9	14.8	15.8	16.8	17.8	18.7	19.7
17	22	10.9	11.9	12.9	13.9	14.8	15.8	16.8	17.8	18.7	19.7
18	23	10.9	11.9	12.9	13.9	14.8	15.8	16.8	17.8	18.7	19.7
19	24	10.9	11.9	12.9	13.9	14.8	15.8	16.8	17.7	18.7	19.7
20	25	10.9	11.9	12.9	13.9	14.8	15.8	16.8	17.7	18.7	19.7
21	26	10.9	11.9	12.9	13.8	14.8	15.8	16.8	17.7	18.7	19.6

<sup>1</sup>See footnote at end of table.

Table IV.—Temporary Life Annuities<sup>1</sup>—One Life—Expected Return Multiples—Continued

Ages		Temporary period—maximum duration of annuity									
Male	Female	Years									
		11	12	13	14	15	16	17	18	19	20
22	27	10.9	11.9	12.9	13.8	14.8	15.8	16.7	17.7	18.7	19.6
23	28	10.9	11.9	12.9	13.8	14.8	15.8	16.7	17.7	18.7	19.6
24	29	10.9	11.9	12.9	13.8	14.8	15.8	16.7	17.7	18.6	19.6
25	30	10.9	11.9	12.8	13.8	14.8	15.7	16.7	17.7	18.6	19.6
26	31	10.9	11.9	12.8	13.8	14.8	15.7	16.7	17.6	18.6	19.5
27	32	10.9	11.9	12.8	13.8	14.8	15.7	16.7	17.6	18.6	19.5
28	33	10.9	11.8	12.8	13.8	14.7	15.7	16.6	17.6	18.5	19.5
29	34	10.9	11.8	12.8	13.8	14.7	15.7	16.6	17.6	18.5	19.4
30	35	10.9	11.8	12.8	13.7	14.7	15.6	16.6	17.5	18.4	19.4
31	36	10.8	11.8	12.8	13.7	14.7	15.6	16.5	17.5	18.4	19.3
32	37	10.8	11.8	12.7	13.7	14.6	15.6	16.5	17.4	18.4	19.3
33	38	10.8	11.8	12.7	13.7	14.6	15.6	16.5	17.4	18.3	19.2
34	39	10.8	11.8	12.7	13.6	14.6	15.5	16.4	17.4	18.3	19.2
35	40	10.8	11.7	12.7	13.6	14.6	15.5	16.4	17.3	18.2	19.1
36	41	10.8	11.7	12.7	13.6	14.5	15.4	16.3	17.2	18.1	19.0
37	42	10.8	11.7	12.6	13.6	14.5	15.4	16.3	17.2	18.1	18.9
38	43	10.7	11.7	12.6	13.5	14.4	15.3	16.2	17.1	18.0	18.9
39	44	10.7	11.6	12.6	13.5	14.4	15.3	16.2	17.1	17.9	18.8
40	45	10.7	11.6	12.5	13.5	14.4	15.2	16.1	17.0	17.8	18.7
41	46	10.7	11.6	12.5	13.4	14.3	15.2	16.1	16.9	17.8	18.6
42	47	10.6	11.6	12.5	13.4	14.3	15.1	16.0	16.8	17.7	18.5
43	48	10.6	11.5	12.4	13.3	14.2	15.1	15.9	16.7	17.6	18.4
44	49	10.6	11.5	12.4	13.3	14.1	15.0	15.8	16.7	17.5	18.3
45	50	10.5	11.4	12.3	13.2	14.1	14.9	15.7	16.6	17.4	18.1
46	51	10.5	11.4	12.3	13.2	14.0	14.8	15.7	16.5	17.2	18.0
47	52	10.5	11.4	12.2	13.1	13.9	14.7	15.6	16.3	17.1	17.8
48	53	10.4	11.3	12.2	13.0	13.8	14.7	15.4	16.2	17.0	17.7
49	54	10.4	11.3	12.1	12.9	13.8	14.6	15.3	16.1	16.8	17.5
50	55	10.3	11.2	12.0	12.9	13.7	14.5	15.2	16.0	16.7	17.4
51	56	10.3	11.1	12.0	12.8	13.6	14.3	15.1	15.8	16.5	17.2
52	57	10.2	11.1	11.9	12.7	13.5	14.2	14.9	15.6	16.3	17.0
53	58	10.2	11.0	11.8	12.6	13.4	14.1	14.8	15.5	16.1	16.8
54	59	10.1	10.9	11.7	12.5	13.2	14.0	14.6	15.3	15.9	16.5
55	60	10.1	10.9	11.6	12.4	13.1	13.8	14.5	15.1	15.7	16.3
56	61	10.0	10.8	11.5	12.3	13.0	13.7	14.3	14.9	15.5	16.1
57	62	9.9	10.7	11.4	12.2	12.8	13.5	14.1	14.7	15.3	15.8
58	63	9.8	10.6	11.3	12.0	12.7	13.3	13.9	14.5	15.0	15.5
59	64	9.8	10.5	11.2	11.9	12.5	13.2	13.7	14.3	14.8	15.3
60	65	9.7	10.4	11.1	11.7	12.4	13.0	13.5	14.0	14.5	15.0
61	66	9.6	10.3	11.0	11.6	12.2	12.8	13.3	13.8	14.2	14.7
62	67	9.5	10.2	10.8	11.4	12.0	12.5	13.1	13.5	14.0	14.3
63	68	9.4	10.0	10.7	11.3	11.8	12.3	12.8	13.2	13.7	14.0
64	69	9.3	9.9	10.5	11.1	11.6	12.1	12.5	13.0	13.3	13.7
65	70	9.1	9.8	10.3	10.9	11.4	11.9	12.3	12.7	13.0	13.3
66	71	9.0	9.6	10.2	10.7	11.2	11.6	12.0	12.4	12.7	13.0
67	72	8.9	9.5	10.0	10.5	10.9	11.3	11.7	12.0	12.3	12.6
68	73	8.7	9.3	9.8	10.3	10.7	11.1	11.4	11.7	12.0	12.2
69	74	8.6	9.1	9.6	10.0	10.4	10.8	11.1	11.4	11.6	11.8
70	75	8.4	8.9	9.4	9.8	10.2	10.5	10.8	11.0	11.2	11.4
71	76	8.3	8.7	9.2	9.6	9.9	10.2	10.4	10.7	10.9	11.0

<sup>1</sup>See footnote at end of table.



Table IV.—Temporary Life Annuities<sup>1</sup>—One Life—Expected Return Multiples—Continued

Ages		Temporary period—maximum duration of annuity									
Male	Female	Years									
		11	12	13	14	15	16	17	18	19	20
72	77	8.1	8.6	8.9	9.3	9.6	9.9	10.1	10.3	10.5	10.6
73	78	7.9	8.3	8.7	9.0	9.3	9.6	9.8	9.9	10.1	10.2
74	79	7.7	8.1	8.5	8.8	9.0	9.2	9.4	9.6	9.7	9.8
75	80	7.6	7.9	8.2	8.5	8.7	8.9	9.1	9.2	9.3	9.4
76	81	7.4	7.7	8.0	8.2	8.4	8.6	8.7	8.8	8.9	9.0
77	82	7.1	7.5	7.7	7.9	8.1	8.3	8.4	8.5	8.5	8.6
78	83	6.9	7.2	7.4	7.6	7.8	7.9	8.0	8.1	8.2	8.2
79	84	6.7	7.0	7.2	7.3	7.5	7.6	7.7	7.7	7.8	7.8
80	85	6.5	6.7	6.9	7.1	7.2	7.3	7.3	7.4	7.4	7.4
81	86	6.3	6.5	6.6	6.8	6.9	6.9	7.0	7.0	7.1	—
82	87	6.0	6.2	6.4	6.5	6.5	6.6	6.7	6.7	—	—
83	88	5.8	6.0	6.1	6.2	6.2	6.3	6.3	—	—	—
84	89	5.6	5.7	5.8	5.9	5.9	6.0	—	—	—	—
85	90	5.3	5.5	5.5	5.6	5.6	—	—	—	—	—
86	91	5.1	5.2	5.3	5.3	—	—	—	—	—	—

Ages		Temporary period—maximum duration of annuity									
Male	Female	Years									
		21	22	23	24	25	26	27	28	29	30
0 to 8	0 to 13	20.7	21.7	22.7	23.6	24.6	25.6	26.5	27.5	28.4	29.4
9	14	20.7	21.7	22.7	23.6	24.6	25.6	26.5	27.5	28.4	29.4
10	15	20.7	21.7	22.7	23.6	24.6	25.5	26.5	27.5	28.4	29.4
11	16	20.7	21.7	22.6	23.6	24.6	25.5	26.5	27.4	28.4	29.3
12	17	20.7	21.7	22.6	23.6	24.6	25.5	26.5	27.4	28.4	29.3
13	18	20.7	21.7	22.6	23.6	24.6	25.5	26.5	27.4	28.4	29.3
14	19	20.7	21.7	22.6	23.6	24.5	25.5	26.4	27.4	28.3	29.3
15	20	20.7	21.6	22.6	23.6	24.5	25.5	26.4	27.4	28.3	29.2
16	21	20.7	21.6	22.6	23.6	24.5	25.5	26.4	27.3	28.3	29.2
17	22	20.7	21.6	22.6	23.5	24.5	25.4	26.4	27.3	28.2	29.2
18	23	20.7	21.6	22.6	23.5	24.5	25.4	26.3	27.3	28.2	29.1
19	24	20.6	21.6	22.5	23.5	24.4	25.4	26.3	27.2	28.1	29.1
20	25	20.6	21.6	22.5	23.5	24.4	25.3	26.3	27.2	28.1	29.0
21	26	20.6	21.5	22.5	23.4	24.4	25.3	26.2	27.1	28.0	28.9
22	27	20.6	21.5	22.5	23.4	24.3	25.3	26.2	27.1	28.0	28.9
23	28	20.6	21.5	22.4	23.4	24.3	25.2	26.1	27.0	27.9	28.8
24	29	20.5	21.5	22.4	23.3	24.2	25.2	26.1	27.0	27.8	28.7
25	30	20.5	21.4	22.4	23.3	24.2	25.1	26.0	26.9	27.8	28.6
26	31	20.5	21.4	22.3	23.2	24.1	25.0	25.9	26.8	27.7	28.5
27	32	20.4	21.3	22.3	23.2	24.1	25.0	25.8	26.7	27.6	28.4
28	33	20.4	21.3	22.2	23.1	24.0	24.9	25.8	26.6	27.5	28.3
29	34	20.3	21.2	22.1	23.0	23.9	24.8	25.7	26.5	27.4	28.2
30	35	20.3	21.2	22.1	23.0	23.8	24.7	25.6	26.4	27.2	28.1
31	36	20.2	21.1	22.0	22.9	23.8	24.6	25.5	26.3	27.1	27.9
32	37	20.2	21.1	21.9	22.8	23.7	24.5	25.4	26.2	27.0	27.8
33	38	20.1	21.0	21.9	22.7	23.6	24.4	25.2	26.0	26.8	27.6
34	39	20.0	20.9	21.8	22.6	23.5	24.3	25.1	25.9	26.7	27.4
35	40	20.0	20.8	21.7	22.5	23.3	24.2	25.0	25.7	26.5	27.2

<sup>1</sup>See footnote at end of table.

Table IV.—Temporary Life Annuities¹—One Life—Expected Return Multiples—Continued

Ages		Temporary period—maximum duration of annuity									
Male	Female	Years									
		21	22	23	24	25	26	27	28	29	30
36	41	19.9	20.7	21.6	22.4	23.2	24.0	24.8	25.6	26.3	27.0
37	42	19.8	20.6	21.5	22.3	23.1	23.9	24.6	25.4	26.1	26.8
38	43	19.7	20.5	21.4	22.2	23.0	23.7	24.5	25.2	25.9	26.6
39	44	19.6	20.4	21.2	22.0	22.8	23.6	24.3	25.0	25.7	26.4
40	45	19.5	20.3	21.1	21.9	22.6	23.4	24.1	24.8	25.5	26.1
41	46	19.4	20.2	21.0	21.7	22.5	23.2	23.9	24.6	25.2	25.9
42	47	19.3	20.1	20.8	21.6	22.3	23.0	23.7	24.3	25.0	25.6
43	48	19.2	19.9	20.7	21.4	22.1	22.8	23.4	24.1	24.7	25.3
44	49	19.0	19.8	20.5	21.2	21.9	22.6	23.2	23.8	24.4	25.0
45	50	18.9	19.6	20.3	21.0	21.7	22.3	22.9	23.5	24.1	24.6
46	51	18.7	19.4	20.1	20.8	21.5	22.1	22.7	23.2	23.8	24.3
47	52	18.6	19.3	19.9	20.6	21.2	21.8	22.4	22.9	23.4	23.9
48	53	18.4	19.1	19.7	20.4	21.0	21.5	22.1	22.6	23.1	23.5
49	54	18.2	18.9	19.5	20.1	20.7	21.2	21.7	22.2	22.7	23.1
50	55	18.0	18.7	19.3	19.8	20.4	20.9	21.4	21.9	22.3	22.7
51	56	17.8	18.4	19.0	19.6	20.1	20.6	21.1	21.5	21.9	22.3
52	57	17.6	18.2	18.7	19.3	19.8	20.2	20.7	21.1	21.5	21.8
53	58	17.4	17.9	18.5	19.0	19.4	19.9	20.3	20.7	21.0	21.3
54	59	17.1	17.7	18.2	18.7	19.1	19.5	19.9	20.2	20.6	20.8
55	60	16.9	17.4	17.9	18.3	18.7	19.1	19.5	19.8	20.1	20.3
56	61	16.6	17.1	17.5	18.0	18.4	18.7	19.0	19.3	19.6	19.8
57	62	16.3	16.8	17.2	17.6	18.0	18.3	18.6	18.9	19.1	19.3
58	63	16.0	16.5	16.9	17.2	17.6	17.9	18.1	18.4	18.6	18.8
59	64	15.7	16.1	16.5	16.8	17.1	17.4	17.7	17.9	18.1	18.2
60	65	15.4	15.8	16.1	16.4	16.7	17.0	17.2	17.4	17.5	17.7
61	66	15.1	15.4	15.7	16.0	16.3	16.5	16.7	16.9	17.0	17.1
62	67	14.7	15.0	15.3	15.6	15.8	16.0	16.2	16.3	16.4	16.5
63	68	14.4	14.6	14.9	15.1	15.3	15.5	15.7	15.8	15.9	16.0
64	69	14.0	14.3	14.5	14.7	14.9	15.0	15.2	15.3	15.3	15.4
65	70	13.6	13.8	14.1	14.2	14.4	14.5	14.6	14.7	14.8	14.9
66	71	13.2	13.4	13.6	13.8	13.9	14.0	14.1	14.2	14.2	14.3
67	72	12.8	13.0	13.2	13.3	13.4	13.5	13.6	13.7	13.7	13.7
68	73	12.4	12.6	12.7	12.8	12.9	13.0	13.1	13.1	13.2	13.2
69	74	12.0	12.1	12.3	12.4	12.4	12.5	12.6	12.6	12.6	12.6
70	75	11.6	11.7	11.8	11.9	12.0	12.0	12.0	12.1	12.1	12.1
71	76	11.2	11.3	11.3	11.4	11.5	11.5	11.5	11.6	11.6	—
72	77	10.7	10.8	10.9	10.9	11.0	11.0	11.0	11.0	—	—
73	78	10.3	10.4	10.4	10.5	10.5	10.5	10.5	—	—	—
74	79	9.9	9.9	10.0	10.0	10.1	10.1	—	—	—	—
75	80	9.5	9.5	9.6	9.6	9.6	—	—	—	—	—
76	81	9.1	9.1	9.1	9.1	—	—	—	—	—	—
77	82	8.6	8.7	8.7	—	—	—	—	—	—	—
78	83	8.2	8.3	—	—	—	—	—	—	—	—
79	84	7.8	—	—	—	—	—	—	—	—	—

¹The multiples in this table are not applicable to annuities for a term certain; for such cases, see sec. 1.72-5(c) of the Income Tax Regulations.



Table V.— Ordinary Life Annuities  
One Life—Expected Return Multiples

AGE	MULTIPLE	AGE	MULTIPLE	AGE	MULTIPL
5	76.6	42	40.6	79	10.0
6	75.6	43	39.6	80	9.5
7	74.7	44	38.7	81	8.9
8	73.7	45	37.7	82	8.4
9	72.7	46	36.8	83	7.9
10	71.7	47	35.9	84	7.4
11	70.7	48	34.9	85	6.9
12	69.7	49	34.0	86	6.5
13	68.8	50	33.1	87	6.1
14	67.8	51	32.2	88	5.7
15	66.8	52	31.3	89	5.3
16	65.8	53	30.4	90	5.0
17	64.8	54	29.5	91	4.7
18	63.9	55	28.6	92	4.4
19	62.9	56	27.7	93	4.1
20	61.9	57	26.8	94	3.9
21	60.9	58	25.9	95	3.7
22	59.9	59	25.0	96	3.4
23	59.0	60	24.2	97	3.2
24	58.0	61	23.3	98	3.0
25	57.0	62	22.5	99	2.8
26	56.0	63	21.6	100	2.7
27	55.1	64	20.8	101	2.5
28	54.1	65	20.0	102	2.3
29	53.1	66	19.2	103	2.1
30	52.2	67	18.4	104	1.9
31	51.2	68	17.6	105	1.8
32	50.2	69	16.8	106	1.6
33	49.3	70	16.0	107	1.4
34	48.3	71	15.3	108	1.3
35	47.3	72	14.6	109	1.1
36	46.4	73	13.9	110	1.0
37	45.4	74	13.2	111	.9
38	44.4	75	12.5	112	.8
39	43.5	76	11.9	113	.7
40	42.5	77	11.2	114	.6
41	41.5	78	10.6	115	.5

Table VI. — Ordinary Joint Life and Last Survivor Annuities  
Two Lives — Expected Return Multiples

AGES	5	6	7	8	9	10	11	12	13	14
5	83.8	83.3	82.8	82.4	82.0	81.6	81.2	80.9	80.6	80.3
6	83.3	82.8	82.3	81.8	81.4	81.0	80.6	80.3	79.9	79.6
7	82.8	82.3	81.8	81.3	80.9	80.4	80.0	79.6	79.3	78.9
8	82.4	81.8	81.3	80.8	80.3	79.9	79.4	79.0	78.6	78.3
9	82.0	81.4	80.9	80.3	79.8	79.3	78.9	78.4	78.0	77.6
10	81.6	81.0	80.4	79.9	79.3	78.8	78.3	77.9	77.4	77.0
11	81.2	80.6	80.0	79.4	78.9	78.3	77.8	77.3	76.9	76.4
12	80.9	80.3	79.6	79.0	78.4	77.9	77.3	76.8	76.3	75.9
13	80.6	79.9	79.3	78.6	78.0	77.4	76.9	76.3	75.8	75.3
14	80.3	79.6	78.9	78.3	77.6	77.0	76.4	75.9	75.3	74.8
15	80.0	79.3	78.6	77.9	77.3	76.6	76.0	75.4	74.9	74.3
16	79.8	79.0	78.3	77.6	76.9	76.3	75.6	75.0	74.4	73.9
17	79.5	78.8	78.0	77.3	76.6	75.9	75.3	74.6	74.0	73.4
18	79.3	78.5	77.8	77.0	76.3	75.6	74.9	74.3	73.6	73.0
19	79.1	78.3	77.5	76.8	76.0	75.3	74.6	73.9	73.3	72.6
20	78.9	78.1	77.3	76.5	75.8	75.0	74.3	73.6	72.9	72.3
21	78.7	77.9	77.1	76.3	75.5	74.8	74.0	73.3	72.6	71.9
22	78.6	77.7	76.9	76.1	75.3	74.5	73.8	73.0	72.3	71.6
23	78.4	77.6	76.7	75.9	75.1	74.3	73.5	72.8	72.0	71.3
24	78.3	77.4	76.6	75.7	74.9	74.1	73.3	72.6	71.8	71.1
25	78.2	77.3	76.4	75.6	74.8	73.9	73.1	72.3	71.6	70.8
26	78.0	77.2	76.3	75.4	74.6	73.8	72.9	72.1	71.3	70.6
27	77.9	77.1	76.2	75.3	74.4	73.6	72.8	71.9	71.1	70.3
28	77.8	76.9	76.1	75.2	74.3	73.4	72.6	71.8	70.9	70.1
29	77.7	76.8	76.0	75.1	74.2	73.3	72.5	71.6	70.8	70.0
30	77.7	76.8	75.9	75.0	74.1	73.2	72.3	71.5	70.6	69.8
31	77.6	76.7	75.8	74.9	74.0	73.1	72.2	71.3	70.5	69.6
32	77.5	76.6	75.7	74.8	73.9	73.0	72.1	71.2	70.3	69.5
33	77.5	76.5	75.6	74.7	73.8	72.9	72.0	71.1	70.2	69.3
34	77.4	76.5	75.5	74.6	73.7	72.8	71.9	71.0	70.1	69.2
35	77.3	76.4	75.5	74.5	73.6	72.7	71.8	70.9	70.0	69.1
36	77.3	76.3	75.4	74.5	73.5	72.6	71.7	70.8	69.9	69.0
37	77.2	76.3	75.4	74.4	73.5	72.6	71.6	70.7	69.8	68.9
38	77.2	76.2	75.3	74.4	73.4	72.5	71.6	70.6	69.7	68.8
39	77.2	76.2	75.3	74.3	73.4	72.4	71.5	70.6	69.6	68.7
40	77.1	76.2	75.2	74.3	73.3	72.4	71.4	70.5	69.6	68.6
41	77.1	76.1	75.2	74.2	73.3	72.3	71.4	70.4	69.5	68.6
42	77.0	76.1	75.1	74.2	73.2	72.3	71.3	70.4	69.4	68.5
43	77.0	76.1	75.1	74.1	73.2	72.2	71.3	70.3	69.4	68.5
44	77.0	76.0	75.1	74.1	73.1	72.2	71.2	70.3	69.3	68.4
45	77.0	76.0	75.0	74.1	73.1	72.2	71.2	70.2	69.3	68.4
46	76.9	76.0	75.0	74.0	73.1	72.1	71.2	70.2	69.3	68.3
47	76.9	75.9	75.0	74.0	73.1	72.1	71.1	70.2	69.2	68.3
48	76.9	75.9	75.0	74.0	73.0	72.1	71.1	70.1	69.2	68.2
49	76.9	75.9	74.9	74.0	73.0	72.0	71.1	70.1	69.1	68.2
50	76.9	75.9	74.9	73.9	73.0	72.0	71.0	70.1	69.1	68.2
51	76.8	75.9	74.9	73.9	73.0	72.0	71.0	70.1	69.1	68.1
52	76.8	75.9	74.9	73.9	72.9	72.0	71.0	70.0	69.1	68.1
53	76.8	75.8	74.9	73.9	72.9	71.9	71.0	70.0	69.0	68.1
54	76.8	75.8	74.8	73.9	72.9	71.9	71.0	70.0	69.0	68.1
55	76.8	75.8	74.8	73.9	72.9	71.9	70.9	70.0	69.0	68.0
56	76.8	75.8	74.8	73.8	72.9	71.9	70.9	69.9	69.0	68.0
57	76.8	75.8	74.8	73.8	72.9	71.9	70.9	69.9	69.0	68.0
58	76.8	75.8	74.8	73.8	72.8	71.9	70.9	69.9	68.9	68.0
59	76.7	75.8	74.8	73.8	72.8	71.9	70.9	69.9	68.9	68.0
60	76.7	75.8	74.8	73.8	72.8	71.8	70.9	69.9	68.9	67.9
61	76.7	75.7	74.8	73.8	72.8	71.8	70.9	69.9	68.9	67.9
62	76.7	75.7	74.8	73.8	72.8	71.8	70.8	69.9	68.9	67.9



Table VI.—Ordinary Joint Life and Last Survivor Annuities Two Lives—Expected Return Multiples										
AGES	5	6	7	8	9	10	11	12	13	14
63	76.7	75.7	74.8	73.8	72.8	71.8	70.8	69.9	68.9	67.9
64	76.7	75.7	74.7	73.8	72.8	71.8	70.8	69.8	68.9	67.9
65	76.7	75.7	74.7	73.8	72.8	71.8	70.8	69.8	68.9	67.9
66	76.7	75.7	74.7	73.7	72.8	71.8	70.8	69.8	68.9	67.9
67	76.7	75.7	74.7	73.7	72.8	71.8	70.8	69.8	68.8	67.9
68	76.7	75.7	74.7	73.7	72.8	71.8	70.8	69.8	68.8	67.9
69	76.7	75.7	74.7	73.7	72.7	71.8	70.8	69.8	68.8	67.8
70	76.7	75.7	74.7	73.7	72.7	71.8	70.8	69.8	68.8	67.8
71	76.7	75.7	74.7	73.7	72.7	71.8	70.8	69.8	68.8	67.8
72	76.7	75.7	74.7	73.7	72.7	71.8	70.8	69.8	68.8	67.8
73	76.7	75.7	74.7	73.7	72.7	71.7	70.8	69.8	68.8	67.8
74	76.7	75.7	74.7	73.7	72.7	71.7	70.8	69.8	68.8	67.8
75	76.7	75.7	74.7	73.7	72.7	71.7	70.8	69.8	68.8	67.8
76	76.6	75.7	74.7	73.7	72.7	71.7	70.8	69.8	68.8	67.8
77	76.6	75.7	74.7	73.7	72.7	71.7	70.8	69.8	68.8	67.8
78	76.6	75.7	74.7	73.7	72.7	71.7	70.7	69.8	68.8	67.8
79	76.6	75.7	74.7	73.7	72.7	71.7	70.7	69.8	68.8	67.8
80	76.6	75.7	74.7	73.7	72.7	71.7	70.7	69.8	68.8	67.8
81	76.6	75.7	74.7	73.7	72.7	71.7	70.7	69.8	68.8	67.8
82	76.6	75.7	74.7	73.7	72.7	71.7	70.7	69.8	68.8	67.8
83	76.6	75.7	74.7	73.7	72.7	71.7	70.7	69.8	68.8	67.8
84	76.6	75.7	74.7	73.7	72.7	71.7	70.7	69.8	68.8	67.8
85	76.6	75.7	74.7	73.7	72.7	71.7	70.7	69.8	68.8	67.8
86	76.6	75.7	74.7	73.7	72.7	71.7	70.7	69.8	68.8	67.8
87	76.6	75.7	74.7	73.7	72.7	71.7	70.7	69.8	68.8	67.8
88	76.6	75.7	74.7	73.7	72.7	71.7	70.7	69.8	68.8	67.8
89	76.6	75.7	74.7	73.7	72.7	71.7	70.7	69.7	68.8	67.8
90	76.6	75.6	74.7	73.7	72.7	71.7	70.7	69.7	68.8	67.8
91	76.6	75.6	74.7	73.7	72.7	71.7	70.7	69.7	68.8	67.8
92	76.6	75.6	74.7	73.7	72.7	71.7	70.7	69.7	68.8	67.8
93	76.6	75.6	74.7	73.7	72.7	71.7	70.7	69.7	68.8	67.8
94	76.6	75.6	74.7	73.7	72.7	71.7	70.7	69.7	68.8	67.8
95	76.6	75.6	74.7	73.7	72.7	71.7	70.7	69.7	68.8	67.8
96	76.6	75.6	74.7	73.7	72.7	71.7	70.7	69.7	68.8	67.8
97	76.6	75.6	74.7	73.7	72.7	71.7	70.7	69.7	68.8	67.8
98	76.6	75.6	74.7	73.7	72.7	71.7	70.7	69.7	68.8	67.8
99	76.6	75.6	74.7	73.7	72.7	71.7	70.7	69.7	68.8	67.8
100	76.6	75.6	74.7	73.7	72.7	71.7	70.7	69.7	68.8	67.8
101	76.6	75.6	74.7	73.7	72.7	71.7	70.7	69.7	68.8	67.8
102	76.6	75.6	74.7	73.7	72.7	71.7	70.7	69.7	68.8	67.8
103	76.6	75.6	74.7	73.7	72.7	71.7	70.7	69.7	68.8	67.8
104	76.6	75.6	74.7	73.7	72.7	71.7	70.7	69.7	68.8	67.8
105	76.6	75.6	74.7	73.7	72.7	71.7	70.7	69.7	68.8	67.8
106	76.6	75.6	74.7	73.7	72.7	71.7	70.7	69.7	68.8	67.8
107	76.6	75.6	74.7	73.7	72.7	71.7	70.7	69.7	68.8	67.8
108	76.6	75.6	74.7	73.7	72.7	71.7	70.7	69.7	68.8	67.8
109	76.6	75.6	74.7	73.7	72.7	71.7	70.7	69.7	68.8	67.8
110	76.6	75.6	74.7	73.7	72.7	71.7	70.7	69.7	68.8	67.8
111	76.6	75.6	74.7	73.7	72.7	71.7	70.7	69.7	68.8	67.8
112	76.6	75.6	74.7	73.7	72.7	71.7	70.7	69.7	68.8	67.8
113	76.6	75.6	74.7	73.7	72.7	71.7	70.7	69.7	68.8	67.8
114	76.6	75.6	74.7	73.7	72.7	71.7	70.7	69.7	68.8	67.8
115	76.6	75.6	74.7	73.7	72.7	71.7	70.7	69.7	68.8	67.8



Table VI.—Ordinary Joint Life and Last Survivor Annuities Two Lives—Expected Return Multiples										
AGES	15	16	17	18	19	20	21	22	23	24
15	73.8	73.3	72.9	72.4	72.0	71.6	71.3	70.9	70.6	70.3
16	73.3	72.8	72.3	71.9	71.4	71.0	70.7	70.3	70.0	69.6
17	72.9	72.3	71.8	71.3	70.9	70.5	70.0	69.7	69.3	69.0
18	72.4	71.9	71.3	70.8	70.4	69.9	69.5	69.0	68.7	68.3
19	72.0	71.4	70.9	70.4	69.8	69.4	68.9	68.5	68.1	67.7
20	71.6	71.0	70.5	69.9	69.4	68.8	68.4	67.9	67.5	67.1
21	71.3	70.7	70.0	69.5	68.9	68.4	67.9	67.4	66.9	66.5
22	70.9	70.3	69.7	69.0	68.5	67.9	67.4	66.9	66.4	65.9
23	70.6	70.0	69.3	68.7	68.1	67.5	66.9	66.4	65.9	65.4
24	70.3	69.6	69.0	68.3	67.7	67.1	66.5	65.9	65.4	64.9
25	70.1	69.3	68.6	68.0	67.3	66.7	66.1	65.5	64.9	64.4
26	69.8	69.1	68.3	67.6	67.0	66.3	65.7	65.1	64.5	63.9
27	69.6	68.8	68.1	67.3	66.7	66.0	65.3	64.7	64.1	63.5
28	69.3	68.6	67.8	67.1	66.4	65.7	65.0	64.3	63.7	63.1
29	69.1	68.4	67.6	66.8	66.1	65.4	64.7	64.0	63.3	62.7
30	69.0	68.2	67.4	66.6	65.8	65.1	64.4	63.7	63.0	62.3
31	68.8	68.0	67.2	66.4	65.6	64.8	64.1	63.4	62.7	62.0
32	68.6	67.8	67.0	66.2	65.4	64.6	63.8	63.1	62.4	61.7
33	68.5	67.6	66.8	66.0	65.2	64.4	63.6	62.8	62.1	61.4
34	68.3	67.5	66.6	65.8	65.0	64.2	63.4	62.6	61.9	61.1
35	68.2	67.4	66.5	65.6	64.8	64.0	63.2	62.4	61.6	60.9
36	68.1	67.2	66.4	65.5	64.7	63.8	63.0	62.2	61.4	60.6
37	68.0	67.1	66.2	65.4	64.5	63.7	62.8	62.0	61.2	60.4
38	67.9	67.0	66.1	65.2	64.4	63.5	62.7	61.8	61.0	60.2
39	67.8	66.9	66.0	65.1	64.2	63.4	62.5	61.7	60.8	60.0
40	67.7	66.8	65.9	65.0	64.1	63.3	62.4	61.5	60.7	59.9
41	67.7	66.7	65.8	64.9	64.0	63.1	62.3	61.4	60.5	59.7
42	67.6	66.7	65.7	64.8	63.9	63.0	62.2	61.3	60.4	59.6
43	67.5	66.6	65.7	64.8	63.8	62.9	62.1	61.2	60.3	59.4
44	67.5	66.5	65.6	64.7	63.8	62.9	62.0	61.1	60.2	59.3
45	67.4	66.5	65.5	64.6	63.7	62.8	61.9	61.0	60.1	59.2
46	67.4	66.4	65.5	64.6	63.6	62.7	61.8	60.9	60.0	59.1
47	67.3	66.4	65.4	64.5	63.6	62.6	61.7	60.8	59.9	59.0
48	67.3	66.3	65.4	64.4	63.5	62.6	61.6	60.7	59.8	58.9
49	67.2	66.3	65.3	64.4	63.5	62.5	61.6	60.7	59.7	58.8
50	67.2	66.2	65.3	64.3	63.4	62.5	61.5	60.6	59.7	58.8
51	67.2	66.2	65.3	64.3	63.4	62.4	61.5	60.5	59.6	58.7
52	67.1	66.2	65.2	64.3	63.3	62.4	61.4	60.5	59.6	58.6
53	67.1	66.2	65.2	64.2	63.3	62.3	61.4	60.4	59.5	58.6
54	67.1	66.1	65.2	64.2	63.2	62.3	61.3	60.4	59.5	58.5
55	67.1	66.1	65.1	64.2	63.2	62.3	61.3	60.4	59.4	58.5
56	67.0	66.1	65.1	64.1	63.2	62.2	61.3	60.3	59.4	58.4
57	67.0	66.1	65.1	64.1	63.2	62.2	61.2	60.3	59.3	58.4
58	67.0	66.0	65.1	64.1	63.1	62.2	61.2	60.3	59.3	58.4
59	67.0	66.0	65.0	64.1	63.1	62.1	61.2	60.2	59.3	58.3
60	67.0	66.0	65.0	64.1	63.1	62.1	61.2	60.2	59.2	58.3
61	67.0	66.0	65.0	64.0	63.1	62.1	61.1	60.2	59.2	58.3
62	66.9	66.0	65.0	64.0	63.1	62.1	61.1	60.2	59.2	58.2
63	66.9	66.0	65.0	64.0	63.0	62.1	61.1	60.1	59.2	58.2
64	66.9	65.9	65.0	64.0	63.0	62.1	61.1	60.1	59.2	58.2
65	66.9	65.9	65.0	64.0	63.0	62.0	61.1	60.1	59.1	58.2
66	66.9	65.9	64.9	64.0	63.0	62.0	61.1	60.1	59.1	58.2
67	66.9	65.9	64.9	64.0	63.0	62.0	61.0	60.1	59.1	58.1
68	66.9	65.9	64.9	64.0	63.0	62.0	61.0	60.1	59.1	58.1
69	66.9	65.9	64.9	63.9	63.0	62.0	61.0	60.0	59.1	58.1
70	66.9	65.9	64.9	63.9	63.0	62.0	61.0	60.0	59.1	58.1
71	66.9	65.9	64.9	63.9	62.9	62.0	61.0	60.0	59.1	58.1
72	66.9	65.9	64.9	63.9	62.9	62.0	61.0	60.0	59.0	58.1



Table VI.—Ordinary Joint Life and Last Survivor Annuities Two Lives—Expected Return Multiples										
AGES	15	16	17	18	19	20	21	22	23	24
73	66.8	65.9	64.9	63.9	62.9	62.0	61.0	60.0	59.0	58.1
74	66.8	65.9	64.9	63.9	62.9	62.0	61.0	60.0	59.0	58.1
75	66.8	65.9	64.9	63.9	62.9	61.9	61.0	60.0	59.0	58.1
76	66.8	65.9	64.9	63.9	62.9	61.9	61.0	60.0	59.0	58.0
77	66.8	65.8	64.9	63.9	62.9	61.9	61.0	60.0	59.0	58.0
78	66.8	65.8	64.9	63.9	62.9	61.9	61.0	60.0	59.0	58.0
79	66.8	65.8	64.9	63.9	62.9	61.9	61.0	60.0	59.0	58.0
80	66.8	65.8	64.9	63.9	62.9	61.9	60.9	60.0	59.0	58.0
81	66.8	65.8	64.9	63.9	62.9	61.9	60.9	60.0	59.0	58.0
82	66.8	65.8	64.9	63.9	62.9	61.9	60.9	60.0	59.0	58.0
83	66.8	65.8	64.9	63.9	62.9	61.9	60.9	60.0	59.0	58.0
84	66.8	65.8	64.8	63.9	62.9	61.9	60.9	60.0	59.0	58.0
85	66.8	65.8	64.8	63.9	62.9	61.9	60.9	60.0	59.0	58.0
86	66.8	65.8	64.8	63.9	62.9	61.9	60.9	60.0	59.0	58.0
87	66.8	65.8	64.8	63.9	62.9	61.9	60.9	60.0	59.0	58.0
88	66.8	65.8	64.8	63.9	62.9	61.9	60.9	60.0	59.0	58.0
89	66.8	65.8	64.8	63.9	62.9	61.9	60.9	60.0	59.0	58.0
90	66.8	65.8	64.8	63.9	62.9	61.9	60.9	60.0	59.0	58.0
91	66.8	65.8	64.8	63.9	62.9	61.9	60.9	60.0	59.0	58.0
92	66.8	65.8	64.8	63.9	62.9	61.9	60.9	59.9	59.0	58.0
93	66.8	65.8	64.8	63.9	62.9	61.9	60.9	59.9	59.0	58.0
94	66.8	65.8	64.8	63.9	62.9	61.9	60.9	59.9	59.0	58.0
95	66.8	65.8	64.8	63.9	62.9	61.9	60.9	59.9	59.0	58.0
96	66.8	65.8	64.8	63.9	62.9	61.9	60.9	59.9	59.0	58.0
97	66.8	65.8	64.8	63.9	62.9	61.9	60.9	59.9	59.0	58.0
98	66.8	65.8	64.8	63.9	62.9	61.9	60.9	59.9	59.0	58.0
99	66.8	65.8	64.8	63.9	62.9	61.9	60.9	59.9	59.0	58.0
100	66.8	65.8	64.8	63.9	62.9	61.9	60.9	59.9	59.0	58.0
101	66.8	65.8	64.8	63.9	62.9	61.9	60.9	59.9	59.0	58.0
102	66.8	65.8	64.8	63.9	62.9	61.9	60.9	59.9	59.0	58.0
103	66.8	65.8	64.8	63.9	62.9	61.9	60.9	59.9	59.0	58.0
104	66.8	65.8	64.8	63.9	62.9	61.9	60.9	59.9	59.0	58.0
105	66.8	65.8	64.8	63.9	62.9	61.9	60.9	59.9	59.0	58.0
106	66.8	65.8	64.8	63.9	62.9	61.9	60.9	59.9	59.0	58.0
107	66.8	65.8	64.8	63.9	62.9	61.9	60.9	59.9	59.0	58.0
108	66.8	65.8	64.8	63.9	62.9	61.9	60.9	59.9	59.0	58.0
109	66.8	65.8	64.8	63.9	62.9	61.9	60.9	59.9	59.0	58.0
110	66.8	65.8	64.8	63.9	62.9	61.9	60.9	59.9	59.0	58.0
111	66.8	65.8	64.8	63.9	62.9	61.9	60.9	59.9	59.0	58.0
112	66.8	65.8	64.8	63.9	62.9	61.9	60.9	59.9	59.0	58.0
113	66.8	65.8	64.8	63.9	62.9	61.9	60.9	59.9	59.0	58.0
114	66.8	65.8	64.8	63.9	62.9	61.9	60.9	59.9	59.0	58.0
115	66.8	65.8	64.8	63.9	62.9	61.9	60.9	59.9	59.0	58.0

Table VI. — Ordinary Joint Life and Last Survivor Annuities Two Lives—Expected Return Multiples										
AGES	25	26	27	28	29	30	31	32	33	34
25	63.9	63.4	62.9	62.5	62.1	61.7	61.3	61.0	60.7	60.4
26	63.4	62.9	62.4	61.9	61.5	61.1	60.7	60.4	60.0	59.7
27	62.9	62.4	61.9	61.4	60.9	60.5	60.1	59.7	59.4	59.0
28	62.5	61.9	61.4	60.9	60.4	60.0	59.5	59.1	58.7	58.4
29	62.1	61.5	60.9	60.4	59.9	59.4	59.0	58.5	58.1	57.7
30	61.7	61.1	60.5	60.0	59.4	58.9	58.4	58.0	57.5	57.1
31	61.3	60.7	60.1	59.5	59.0	58.4	57.9	57.4	57.0	56.5
32	61.0	60.4	59.7	59.1	58.5	58.0	57.4	56.9	56.4	56.0
33	60.7	60.0	59.4	58.7	58.1	57.5	57.0	56.4	55.9	55.5
34	60.4	59.7	59.0	58.4	57.7	57.1	56.5	56.0	55.5	54.9
35	60.1	59.4	58.7	58.0	57.4	56.7	56.1	55.6	55.0	54.5
36	59.9	59.1	58.4	57.7	57.0	56.4	55.8	55.1	54.6	54.0
37	59.6	58.9	58.1	57.4	56.7	56.0	55.4	54.8	54.2	53.6
38	59.4	58.6	57.9	57.1	56.4	55.7	55.1	54.4	53.8	53.2
39	59.2	58.4	57.7	56.9	56.2	55.4	54.7	54.1	53.4	52.8
40	59.0	58.2	57.4	56.7	55.9	55.2	54.5	53.8	53.1	52.4
41	58.9	58.0	57.2	56.4	55.7	54.9	54.2	53.5	52.8	52.1
42	58.7	57.9	57.1	56.2	55.5	54.7	53.9	53.2	52.5	51.8
43	58.6	57.7	56.9	56.1	55.3	54.5	53.7	52.9	52.2	51.5
44	58.4	57.6	56.7	55.9	55.1	54.3	53.5	52.7	52.0	51.2
45	58.3	57.4	56.6	55.7	54.9	54.1	53.3	52.5	51.7	51.0
46	58.2	57.3	56.5	55.6	54.8	53.9	53.1	52.3	51.5	50.7
47	58.1	57.2	56.3	55.5	54.6	53.8	52.9	52.1	51.3	50.5
48	58.0	57.1	56.2	55.3	54.5	53.6	52.8	51.9	51.1	50.3
49	57.9	57.0	56.1	55.2	54.4	53.5	52.6	51.8	51.0	50.1
50	57.8	56.9	56.0	55.1	54.2	53.4	52.5	51.7	50.8	50.0
51	57.8	56.9	55.9	55.0	54.1	53.3	52.4	51.5	50.7	49.8
52	57.7	56.8	55.9	55.0	54.1	53.2	52.3	51.4	50.5	49.7
53	57.6	56.7	55.8	54.9	54.0	53.1	52.2	51.3	50.4	49.6
54	57.6	56.7	55.7	54.8	53.9	53.0	52.1	51.2	50.3	49.4
55	57.5	56.6	55.7	54.7	53.8	52.9	52.0	51.1	50.2	49.3
56	57.5	56.5	55.6	54.7	53.8	52.8	51.9	51.0	50.1	49.2
57	57.4	56.5	55.6	54.6	53.7	52.8	51.9	50.9	50.0	49.1
58	57.4	56.5	55.5	54.6	53.6	52.7	51.8	50.9	50.0	49.1
59	57.4	56.4	55.5	54.5	53.6	52.7	51.7	50.8	49.9	49.0
60	57.3	56.4	55.4	54.5	53.6	52.6	51.7	50.8	49.8	48.9
61	57.3	56.4	55.4	54.5	53.5	52.6	51.6	50.7	49.8	48.9
62	57.3	56.3	55.4	54.4	53.5	52.5	51.6	50.7	49.7	48.8
63	57.3	56.3	55.3	54.4	53.4	52.5	51.6	50.6	49.7	48.7
64	57.2	56.3	55.3	54.4	53.4	52.5	51.5	50.6	49.6	48.7
65	57.2	56.3	55.3	54.3	53.4	52.4	51.5	50.5	49.6	48.7
66	57.2	56.2	55.3	54.3	53.4	52.4	51.5	50.5	49.6	48.6
67	57.2	56.2	55.3	54.3	53.3	52.4	51.4	50.5	49.5	48.6
68	57.2	56.2	55.2	54.3	53.3	52.4	51.4	50.4	49.5	48.6
69	57.1	56.2	55.2	54.3	53.3	52.3	51.4	50.4	49.5	48.5
70	57.1	56.2	55.2	54.2	53.3	52.3	51.4	50.4	49.4	48.5
71	57.1	56.2	55.2	54.2	53.3	52.3	51.3	50.4	49.4	48.5
72	57.1	56.1	55.2	54.2	53.2	52.3	51.3	50.4	49.4	48.5
73	57.1	56.1	55.2	54.2	53.2	52.3	51.3	50.3	49.4	48.4
74	57.1	56.1	55.2	54.2	53.2	52.3	51.3	50.3	49.4	48.4
75	57.1	56.1	55.1	54.2	53.2	52.2	51.3	50.3	49.4	48.4
76	57.1	56.1	55.1	54.2	53.2	52.2	51.3	50.3	49.3	48.4
77	57.1	56.1	55.1	54.2	53.2	52.2	51.3	50.3	49.3	48.4
78	57.1	56.1	55.1	54.2	53.2	52.2	51.3	50.3	49.3	48.4
79	57.1	56.1	55.1	54.1	53.2	52.2	51.2	50.3	49.3	48.4
80	57.1	56.1	55.1	54.1	53.2	52.2	51.2	50.3	49.3	48.3
81	57.0	56.1	55.1	54.1	53.2	52.2	51.2	50.3	49.3	48.3
82	57.0	56.1	55.1	54.1	53.2	52.2	51.2	50.3	49.3	48.3



Table VI.— Ordinary Joint Life and Last Survivor Annuities Two Lives—Expected Return Multiples										
AGES	25	26	27	28	29	30	31	32	33	34
83	57.0	56.1	55.1	54.1	53.2	52.2	51.2	50.3	49.3	48.3
84	57.0	56.1	55.1	54.1	53.2	52.2	51.2	50.3	49.3	48.3
85	57.0	56.1	55.1	54.1	53.2	52.2	51.2	50.2	49.3	48.3
86	57.0	56.1	55.1	54.1	53.1	52.2	51.2	50.2	49.3	48.3
87	57.0	56.1	55.1	54.1	53.1	52.2	51.2	50.2	49.3	48.3
88	57.0	56.1	55.1	54.1	53.1	52.2	51.2	50.2	49.3	48.3
89	57.0	56.1	55.1	54.1	53.1	52.2	51.2	50.2	49.3	48.3
90	57.0	56.1	55.1	54.1	53.1	52.2	51.2	50.2	49.3	48.3
91	57.0	56.1	55.1	54.1	53.1	52.2	51.2	50.2	49.3	48.3
92	57.0	56.1	55.1	54.1	53.1	52.2	51.2	50.2	49.3	48.3
93	57.0	56.1	55.1	54.1	53.1	52.2	51.2	50.2	49.3	48.3
94	57.0	56.0	55.1	54.1	53.1	52.2	51.2	50.2	49.3	48.3
95	57.0	56.0	55.1	54.1	53.1	52.2	51.2	50.2	49.3	48.3
96	57.0	56.0	55.1	54.1	53.1	52.2	51.2	50.2	49.3	48.3
97	57.0	56.0	55.1	54.1	53.1	52.2	51.2	50.2	49.3	48.3
98	57.0	56.0	55.1	54.1	53.1	52.2	51.2	50.2	49.3	48.3
99	57.0	56.0	55.1	54.1	53.1	52.2	51.2	50.2	49.3	48.3
100	57.0	56.0	55.1	54.1	53.1	52.2	51.2	50.2	49.3	48.3
101	57.0	56.0	55.1	54.1	53.1	52.2	51.2	50.2	49.3	48.3
102	57.0	56.0	55.1	54.1	53.1	52.2	51.2	50.2	49.3	48.3
103	57.0	56.0	55.1	54.1	53.1	52.2	51.2	50.2	49.3	48.3
104	57.0	56.0	55.1	54.1	53.1	52.2	51.2	50.2	49.3	48.3
105	57.0	56.0	55.1	54.1	53.1	52.2	51.2	50.2	49.3	48.3
106	57.0	56.0	55.1	54.1	53.1	52.2	51.2	50.2	49.3	48.3
107	57.0	56.0	55.1	54.1	53.1	52.2	51.2	50.2	49.3	48.3
108	57.0	56.0	55.1	54.1	53.1	52.2	51.2	50.2	49.3	48.3
109	57.0	56.0	55.1	54.1	53.1	52.2	51.2	50.2	49.3	48.3
110	57.0	56.0	55.1	54.1	53.1	52.2	51.2	50.2	49.3	48.3
111	57.0	56.0	55.1	54.1	53.1	52.2	51.2	50.2	49.3	48.3
112	57.0	56.0	55.1	54.1	53.1	52.2	51.2	50.2	49.3	48.3
113	57.0	56.0	55.1	54.1	53.1	52.2	51.2	50.2	49.3	48.3
114	57.0	56.0	55.1	54.1	53.1	52.2	51.2	50.2	49.3	48.3
115	57.0	56.0	55.1	54.1	53.1	52.2	51.2	50.2	49.3	48.3

Table VI.— Ordinary Joint Life and Last Survivor Annuities Two Lives— Expected Return Multiples										
AGES	35	36	37	38	39	40	41	42	43	44
35	54.0	53.5	53.0	52.6	52.2	51.8	51.4	51.1	50.8	50.5
36	53.5	53.0	52.5	52.0	51.6	51.2	50.8	50.4	50.1	49.8
37	53.0	52.5	52.0	51.5	51.0	50.6	50.2	49.8	49.5	49.1
38	52.6	52.0	51.5	51.0	50.5	50.0	49.6	49.2	48.8	48.5
39	52.2	51.6	51.0	50.5	50.0	49.5	49.1	48.6	48.2	47.8
40	51.8	51.2	50.6	50.0	49.5	49.0	48.5	48.1	47.6	47.2
41	51.4	50.8	50.2	49.6	49.1	48.5	48.0	47.5	47.1	46.7
42	51.1	50.4	49.8	49.2	48.6	48.1	47.5	47.0	46.6	46.1
43	50.8	50.1	49.5	48.8	48.2	47.6	47.1	46.6	46.0	45.6
44	50.5	49.8	49.1	48.5	47.8	47.2	46.7	46.1	45.6	45.1
45	50.2	49.5	48.8	48.1	47.5	46.9	46.3	45.7	45.1	44.6
46	50.0	49.2	48.5	47.8	47.2	46.5	45.9	45.3	44.7	44.1
47	49.7	49.0	48.3	47.5	46.8	46.2	45.5	44.9	44.3	43.7
48	49.5	48.8	48.0	47.3	46.6	45.9	45.2	44.5	43.9	43.3
49	49.3	48.5	47.8	47.0	46.3	45.6	44.9	44.2	43.6	42.9
50	49.2	48.4	47.6	46.8	46.0	45.3	44.6	43.9	43.2	42.6
51	49.0	48.2	47.4	46.6	45.8	45.1	44.3	43.6	42.9	42.2
52	48.8	48.0	47.2	46.4	45.6	44.8	44.1	43.3	42.6	41.9
53	48.7	47.9	47.0	46.2	45.4	44.6	43.9	43.1	42.4	41.7
54	48.6	47.7	46.9	46.0	45.2	44.4	43.6	42.9	42.1	41.4
55	48.5	47.6	46.7	45.9	45.1	44.2	43.4	42.7	41.9	41.2
56	48.3	47.5	46.6	45.8	44.9	44.1	43.3	42.5	41.7	40.9
57	48.3	47.4	46.5	45.6	44.8	43.9	43.1	42.3	41.5	40.7
58	48.2	47.3	46.4	45.5	44.7	43.8	43.0	42.1	41.3	40.5
59	48.1	47.2	46.3	45.4	44.5	43.7	42.8	42.0	41.2	40.4
60	48.0	47.1	46.2	45.3	44.4	43.6	42.7	41.9	41.0	40.2
61	47.9	47.0	46.1	45.2	44.3	43.5	42.6	41.7	40.9	40.0
62	47.9	47.0	46.0	45.1	44.2	43.4	42.5	41.6	40.8	39.9
63	47.8	46.9	46.0	45.1	44.2	43.3	42.4	41.5	40.6	39.8
64	47.8	46.8	45.9	45.0	44.1	43.2	42.3	41.4	40.5	39.7
65	47.7	46.8	45.9	44.9	44.0	43.1	42.2	41.3	40.4	39.6
66	47.7	46.7	45.8	44.9	44.0	43.1	42.2	41.3	40.4	39.5
67	47.6	46.7	45.8	44.8	43.9	43.0	42.1	41.2	40.3	39.4
68	47.6	46.7	45.7	44.8	43.9	42.9	42.0	41.1	40.2	39.3
69	47.6	46.6	45.7	44.8	43.8	42.9	42.0	41.1	40.2	39.3
70	47.5	46.6	45.7	44.7	43.8	42.9	41.9	41.0	40.1	39.2
71	47.5	46.6	45.6	44.7	43.8	42.8	41.9	41.0	40.1	39.1
72	47.5	46.6	45.6	44.7	43.7	42.8	41.9	40.9	40.0	39.1
73	47.5	46.5	45.6	44.6	43.7	42.8	41.8	40.9	40.0	39.0
74	47.5	46.5	45.6	44.6	43.7	42.7	41.8	40.9	39.9	39.0
75	47.4	46.5	45.5	44.6	43.6	42.7	41.8	40.8	39.9	39.0
76	47.4	46.5	45.5	44.6	43.6	42.7	41.7	40.8	39.9	38.9
77	47.4	46.5	45.5	44.6	43.6	42.7	41.7	40.8	39.8	38.9
78	47.4	46.4	45.5	44.5	43.6	42.6	41.7	40.7	39.8	38.9
79	47.4	46.4	45.5	44.5	43.6	42.6	41.7	40.7	39.8	38.9
80	47.4	46.4	45.5	44.5	43.6	42.6	41.7	40.7	39.8	38.8
81	47.4	46.4	45.5	44.5	43.5	42.6	41.6	40.7	39.8	38.8
82	47.4	46.4	45.4	44.5	43.5	42.6	41.6	40.7	39.7	38.8
83	47.4	46.4	45.4	44.5	43.5	42.6	41.6	40.7	39.7	38.8
84	47.4	46.4	45.4	44.5	43.5	42.6	41.6	40.7	39.7	38.8
85	47.4	46.4	45.4	44.5	43.5	42.6	41.6	40.7	39.7	38.8
86	47.3	46.4	45.4	44.5	43.5	42.5	41.6	40.6	39.7	38.8
87	47.3	46.4	45.4	44.5	43.5	42.5	41.6	40.6	39.7	38.7
88	47.3	46.4	45.4	44.5	43.5	42.5	41.6	40.6	39.7	38.7
89	47.3	46.4	45.4	44.4	43.5	42.5	41.6	40.6	39.7	38.7
90	47.3	46.4	45.4	44.4	43.5	42.5	41.6	40.6	39.7	38.7
91	47.3	46.4	45.4	44.4	43.5	42.5	41.6	40.6	39.7	38.7
92	47.3	46.4	45.4	44.4	43.5	42.5	41.6	40.6	39.7	38.7



Table VI.— Ordinary Joint Life and Last Survivor Annuities Two Lives—Expected Return Multiples										
AGES	35	36	37	38	39	40	41	42	43	44
93	47.3	46.4	45.4	44.4	43.5	42.5	41.6	40.6	39.7	38.7
94	47.3	46.4	45.4	44.4	43.5	42.5	41.6	40.6	39.7	38.7
95	47.3	46.4	45.4	44.4	43.5	42.5	41.6	40.6	39.7	38.7
96	47.3	46.4	45.4	44.4	43.5	42.5	41.6	40.6	39.7	38.7
97	47.3	46.4	45.4	44.4	43.5	42.5	41.6	40.6	39.6	38.7
98	47.3	46.4	45.4	44.4	43.5	42.5	41.6	40.6	39.6	38.7
99	47.3	46.4	45.4	44.4	43.5	42.5	41.5	40.6	39.6	38.7
100	47.3	46.4	45.4	44.4	43.5	42.5	41.5	40.6	39.6	38.7
101	47.3	46.4	45.4	44.4	43.5	42.5	41.5	40.6	39.6	38.7
102	47.3	46.4	45.4	44.4	43.5	42.5	41.5	40.6	39.6	38.7
103	47.3	46.4	45.4	44.4	43.5	42.5	41.5	40.6	39.6	38.7
104	47.3	46.4	45.4	44.4	43.5	42.5	41.5	40.6	39.6	38.7
105	47.3	46.4	45.4	44.4	43.5	42.5	41.5	40.6	39.6	38.7
106	47.3	46.4	45.4	44.4	43.5	42.5	41.5	40.6	39.6	38.7
107	47.3	46.4	45.4	44.4	43.5	42.5	41.5	40.6	39.6	38.7
108	47.3	46.4	45.4	44.4	43.5	42.5	41.5	40.6	39.6	38.7
109	47.3	46.4	45.4	44.4	43.5	42.5	41.5	40.6	39.6	38.7
110	47.3	46.4	45.4	44.4	43.5	42.5	41.5	40.6	39.6	38.7
111	47.3	46.4	45.4	44.4	43.5	42.5	41.5	40.6	39.6	38.7
112	47.3	46.4	45.4	44.4	43.5	42.5	41.5	40.6	39.6	38.7
113	47.3	46.4	45.4	44.4	43.5	42.5	41.5	40.6	39.6	38.7
114	47.3	46.4	45.4	44.4	43.5	42.5	41.5	40.6	39.6	38.7
115	47.3	46.4	45.4	44.4	43.5	42.5	41.5	40.6	39.6	38.7

Table VI.—Ordinary Joint Life and Last Survivor Annuities Two Lives—Expected Return Multiples										
AGES	45	46	47	48	49	50	51	52	53	54
45	44.1	43.6	43.2	42.7	42.3	42.0	41.6	41.3	41.0	40.7
46	43.6	43.1	42.6	42.2	41.8	41.4	41.0	40.6	40.3	40.0
47	43.2	42.6	42.1	41.7	41.2	40.8	40.4	40.0	39.7	39.3
48	42.7	42.2	41.7	41.2	40.7	40.2	39.8	39.4	39.0	38.7
49	42.3	41.8	41.2	40.7	40.2	39.7	39.3	38.8	38.4	38.1
50	42.0	41.4	40.8	40.2	39.7	39.2	38.7	38.3	37.9	37.5
51	41.6	41.0	40.4	39.8	39.3	38.7	38.2	37.8	37.3	36.9
52	41.3	40.6	40.0	39.4	38.8	38.3	37.8	37.3	36.8	36.4
53	41.0	40.3	39.7	39.0	38.4	37.9	37.3	36.8	36.3	35.8
54	40.7	40.0	39.3	38.7	38.1	37.5	36.9	36.4	35.8	35.3
55	40.4	39.7	39.0	38.4	37.7	37.1	36.5	35.9	35.4	34.9
56	40.2	39.5	38.7	38.1	37.4	36.8	36.1	35.6	35.0	34.4
57	40.0	39.2	38.5	37.8	37.1	36.4	35.8	35.2	34.6	34.0
58	39.7	39.0	38.2	37.5	36.8	36.1	35.5	34.8	34.2	33.6
59	39.6	38.8	38.0	37.3	36.6	35.9	35.2	34.5	33.9	33.3
60	39.4	38.6	37.8	37.1	36.3	35.6	34.9	34.2	33.6	32.9
61	39.2	38.4	37.6	36.9	36.1	35.4	34.6	33.9	33.3	32.6
62	39.1	38.3	37.5	36.7	35.9	35.1	34.4	33.7	33.0	32.3
63	38.9	38.1	37.3	36.5	35.7	34.9	34.2	33.5	32.7	32.0
64	38.8	38.0	37.2	36.3	35.5	34.8	34.0	33.2	32.5	31.8
65	38.7	37.9	37.0	36.2	35.4	34.6	33.8	33.0	32.3	31.6
66	38.6	37.8	36.9	36.1	35.2	34.4	33.6	32.9	32.1	31.4
67	38.5	37.7	36.8	36.0	35.1	34.3	33.5	32.7	31.9	31.2
68	38.4	37.6	36.7	35.8	35.0	34.2	33.4	32.5	31.8	31.0
69	38.4	37.5	36.6	35.7	34.9	34.1	33.2	32.4	31.6	30.8
70	38.3	37.4	36.5	35.7	34.8	34.0	33.1	32.3	31.5	30.7
71	38.2	37.3	36.5	35.6	34.7	33.9	33.0	32.2	31.4	30.5
72	38.2	37.3	36.4	35.5	34.6	33.8	32.9	32.1	31.2	30.4
73	38.1	37.2	36.3	35.4	34.6	33.7	32.8	32.0	31.1	30.3
74	38.1	37.2	36.3	35.4	34.5	33.6	32.8	31.9	31.1	30.2
75	38.1	37.1	36.2	35.3	34.5	33.6	32.7	31.8	31.0	30.1
76	38.0	37.1	36.2	35.3	34.4	33.5	32.6	31.8	30.9	30.1
77	38.0	37.1	36.2	35.3	34.4	33.5	32.6	31.7	30.8	30.0
78	38.0	37.0	36.1	35.2	34.3	33.4	32.5	31.7	30.8	29.9
79	37.9	37.0	36.1	35.2	34.3	33.4	32.5	31.6	30.7	29.9
80	37.9	37.0	36.1	35.2	34.2	33.4	32.5	31.6	30.7	29.8
81	37.9	37.0	36.0	35.1	34.2	33.3	32.4	31.5	30.7	29.8
82	37.9	36.9	36.0	35.1	34.2	33.3	32.4	31.5	30.6	29.7
83	37.9	36.9	36.0	35.1	34.2	33.3	32.4	31.5	30.6	29.7
84	37.8	36.9	36.0	35.1	34.2	33.2	32.3	31.4	30.6	29.7
85	37.8	36.9	36.0	35.1	34.1	33.2	32.3	31.4	30.5	29.6
86	37.8	36.9	36.0	35.0	34.1	33.2	32.3	31.4	30.5	29.6
87	37.8	36.9	35.9	35.0	34.1	33.2	32.3	31.4	30.5	29.6
88	37.8	36.9	35.9	35.0	34.1	33.2	32.3	31.4	30.5	29.6
89	37.8	36.9	35.9	35.0	34.1	33.2	32.3	31.4	30.5	29.6
90	37.8	36.9	35.9	35.0	34.1	33.2	32.3	31.3	30.5	29.6
91	37.8	36.8	35.9	35.0	34.1	33.2	32.2	31.3	30.4	29.5
92	37.8	36.8	35.9	35.0	34.1	33.2	32.2	31.3	30.4	29.5
93	37.8	36.8	35.9	35.0	34.1	33.1	32.2	31.3	30.4	29.5
94	37.8	36.8	35.9	35.0	34.1	33.1	32.2	31.3	30.4	29.5
95	37.8	36.8	35.9	35.0	34.0	33.1	32.2	31.3	30.4	29.5
96	37.8	36.8	35.9	35.0	34.0	33.1	32.2	31.3	30.4	29.5
97	37.8	36.8	35.9	35.0	34.0	33.1	32.2	31.3	30.4	29.5
98	37.8	36.8	35.9	35.0	34.0	33.1	32.2	31.3	30.4	29.5
99	37.8	36.8	35.9	35.0	34.0	33.1	32.2	31.3	30.4	29.5
100	37.8	36.8	35.9	35.0	34.0	33.1	32.2	31.3	30.4	29.5
101	37.8	36.8	35.9	35.0	34.0	33.1	32.2	31.3	30.4	29.5
102	37.8	36.8	35.9	35.0	34.0	33.1	32.2	31.3	30.4	29.5



Table VI.— Ordinary Joint Life and Last Survivor Annuities Two Lives— Expected Return Multiples										
AGES	45	46	47	48	49	50	51	52	53	54
103	37.7	36.8	35.9	34.9	34.0	33.1	32.2	31.3	30.4	29.5
104	37.7	36.8	35.9	34.9	34.0	33.1	32.2	31.3	30.4	29.5
105	37.7	36.8	35.9	34.9	34.0	33.1	32.2	31.3	30.4	29.5
106	37.7	36.8	35.9	34.9	34.0	33.1	32.2	31.3	30.4	29.5
107	37.7	36.8	35.9	34.9	34.0	33.1	32.2	31.3	30.4	29.5
108	37.7	36.8	35.9	34.9	34.0	33.1	32.2	31.3	30.4	29.5
109	37.7	36.8	35.9	34.9	34.0	33.1	32.2	31.3	30.4	29.5
110	37.7	36.8	35.9	34.9	34.0	33.1	32.2	31.3	30.4	29.5
111	37.7	36.8	35.9	34.9	34.0	33.1	32.2	31.3	30.4	29.5
112	37.7	36.8	35.9	34.9	34.0	33.1	32.2	31.3	30.4	29.5
113	37.7	36.8	35.9	34.9	34.0	33.1	32.2	31.3	30.4	29.5
114	37.7	36.8	35.9	34.9	34.0	33.1	32.2	31.3	30.4	29.5
115	37.7	36.8	35.9	34.9	34.0	33.1	32.2	31.3	30.4	29.5

Table VI.—Ordinary Joint Life and Last Survivor Annuities Two Lives—Expected Return Multiples										
AGES	55	56	57	58	59	60	61	62	63	64
55	34.4	33.9	33.5	33.1	32.7	32.3	32.0	31.7	31.4	31.1
56	33.9	33.4	33.0	32.5	32.1	31.7	31.4	31.0	30.7	30.4
57	33.5	33.0	32.5	32.0	31.6	31.2	30.8	30.4	30.1	29.8
58	33.1	32.5	32.0	31.5	31.1	30.6	30.2	29.9	29.5	29.2
59	32.7	32.1	31.6	31.1	30.6	30.1	29.7	29.3	28.9	28.6
60	32.3	31.7	31.2	30.6	30.1	29.7	29.2	28.8	28.4	28.0
61	32.0	31.4	30.8	30.2	29.7	29.2	28.7	28.3	27.8	27.4
62	31.7	31.0	30.4	29.9	29.3	28.8	28.3	27.8	27.3	26.9
63	31.4	30.7	30.1	29.5	28.9	28.4	27.8	27.3	26.9	26.4
64	31.1	30.4	29.8	29.2	28.6	28.0	27.4	26.9	26.4	25.9
65	30.9	30.2	29.5	28.9	28.2	27.6	27.1	26.5	26.0	25.5
66	30.6	29.9	29.2	28.6	27.9	27.3	26.7	26.1	25.6	25.1
67	30.4	29.7	29.0	28.3	27.6	27.0	26.4	25.8	25.2	24.7
68	30.2	29.5	28.8	28.1	27.4	26.7	26.1	25.5	24.9	24.3
69	30.1	29.3	28.6	27.8	27.1	26.5	25.8	25.2	24.6	24.0
70	29.9	29.1	28.4	27.6	26.9	26.2	25.6	24.9	24.3	23.7
71	29.7	29.0	28.2	27.5	26.7	26.0	25.3	24.7	24.0	23.4
72	29.6	28.8	28.1	27.3	26.5	25.8	25.1	24.4	23.8	23.1
73	29.5	28.7	27.9	27.1	26.4	25.6	24.9	24.2	23.5	22.9
74	29.4	28.6	27.8	27.0	26.2	25.5	24.7	24.0	23.3	22.7
75	29.3	28.5	27.7	26.9	26.1	25.3	24.6	23.8	23.1	22.4
76	29.2	28.4	27.6	26.8	26.0	25.2	24.4	23.7	23.0	22.3
77	29.1	28.3	27.5	26.7	25.9	25.1	24.3	23.6	22.8	22.1
78	29.1	28.2	27.4	26.6	25.8	25.0	24.2	23.4	22.7	21.9
79	29.0	28.2	27.3	26.5	25.7	24.9	24.1	23.3	22.6	21.8
80	29.0	28.1	27.3	26.4	25.6	24.8	24.0	23.2	22.4	21.7
81	28.9	28.1	27.2	26.4	25.5	24.7	23.9	23.1	22.3	21.6
82	28.9	28.0	27.2	26.3	25.5	24.6	23.8	23.0	22.3	21.5
83	28.8	28.0	27.1	26.3	25.4	24.6	23.8	23.0	22.2	21.4
84	28.8	27.9	27.1	26.2	25.4	24.5	23.7	22.9	22.1	21.3
85	28.8	27.9	27.0	26.2	25.3	24.5	23.7	22.8	22.0	21.3
86	28.7	27.9	27.0	26.1	25.3	24.5	23.6	22.8	22.0	21.2
87	28.7	27.8	27.0	26.1	25.3	24.4	23.6	22.8	21.9	21.1
88	28.7	27.8	27.0	26.1	25.2	24.4	23.5	22.7	21.9	21.1
89	28.7	27.8	26.9	26.1	25.2	24.4	23.5	22.7	21.9	21.1
90	28.7	27.8	26.9	26.1	25.2	24.3	23.5	22.7	21.8	21.0
91	28.7	27.8	26.9	26.0	25.2	24.3	23.5	22.6	21.8	21.0
92	28.6	27.8	26.9	26.0	25.2	24.3	23.5	22.6	21.8	21.0
93	28.6	27.8	26.9	26.0	25.1	24.3	23.4	22.6	21.8	20.9
94	28.6	27.7	26.9	26.0	25.1	24.3	23.4	22.6	21.7	20.9
95	28.6	27.7	26.9	26.0	25.1	24.3	23.4	22.6	21.7	20.9
96	28.6	27.7	26.9	26.0	25.1	24.2	23.4	22.6	21.7	20.9
97	28.6	27.7	26.8	26.0	25.1	24.2	23.4	22.5	21.7	20.9
98	28.6	27.7	26.8	26.0	25.1	24.2	23.4	22.5	21.7	20.9
99	28.6	27.7	26.8	26.0	25.1	24.2	23.4	22.5	21.7	20.9
100	28.6	27.7	26.8	26.0	25.1	24.2	23.4	22.5	21.7	20.8
101	28.6	27.7	26.8	25.9	25.1	24.2	23.4	22.5	21.7	20.8
102	28.6	27.7	26.8	25.9	25.1	24.2	23.3	22.5	21.7	20.8
103	28.6	27.7	26.8	25.9	25.1	24.2	23.3	22.5	21.7	20.8
104	28.6	27.7	26.8	25.9	25.1	24.2	23.3	22.5	21.6	20.8
105	28.6	27.7	26.8	25.9	25.1	24.2	23.3	22.5	21.6	20.8
106	28.6	27.7	26.8	25.9	25.1	24.2	23.3	22.5	21.6	20.8
107	28.6	27.7	26.8	25.9	25.1	24.2	23.3	22.5	21.6	20.8
108	28.6	27.7	26.8	25.9	25.1	24.2	23.3	22.5	21.6	20.8
109	28.6	27.7	26.8	25.9	25.1	24.2	23.3	22.5	21.6	20.8
110	28.6	27.7	26.8	25.9	25.1	24.2	23.3	22.5	21.6	20.8
111	28.6	27.7	26.8	25.9	25.0	24.2	23.3	22.5	21.6	20.8
112	28.6	27.7	26.8	25.9	25.0	24.2	23.3	22.5	21.6	20.8



Table VI. — Ordinary Joint Life and Last Survivor Annuities Two Lives — Expected Return Multiples										
AGES	55	56	57	58	59	60	61	62	63	64
113	28.6	27.7	26.8	25.9	25.0	24.2	23.3	22.5	21.8	20.8
114	28.6	27.7	26.8	25.9	25.0	24.2	23.3	22.5	21.8	20.8
115	28.6	27.7	26.8	25.9	25.0	24.2	23.3	22.5	21.8	20.8

Table VI.— Ordinary Joint Life and Last Survivor Annuities Two Lives— Expected Return Multiples										
AGES	65	66	67	68	69	70	71	72	73	74
65	25.0	24.6	24.2	23.8	23.4	23.1	22.8	22.5	22.2	22.0
66	24.6	24.1	23.7	23.3	22.9	22.5	22.2	21.9	21.6	21.4
67	24.2	23.7	23.2	22.8	22.4	22.0	21.7	21.3	21.0	20.8
68	23.8	23.3	22.8	22.3	21.9	21.5	21.2	20.8	20.5	20.2
69	23.4	22.9	22.4	21.9	21.5	21.1	20.7	20.3	20.0	19.6
70	23.1	22.5	22.0	21.5	21.1	20.6	20.2	19.8	19.4	19.1
71	22.8	22.2	21.7	21.2	20.7	20.2	19.8	19.4	19.0	18.6
72	22.5	21.9	21.3	20.8	20.3	19.8	19.4	18.9	18.5	18.2
73	22.2	21.6	21.0	20.5	20.0	19.4	19.0	18.5	18.1	17.7
74	22.0	21.4	20.8	20.2	19.6	19.1	18.6	18.2	17.7	17.3
75	21.8	21.1	20.5	19.9	19.3	18.8	18.3	17.8	17.3	16.9
76	21.6	20.9	20.3	19.7	19.1	18.5	18.0	17.5	17.0	16.5
77	21.4	20.7	20.1	19.4	18.8	18.3	17.7	17.2	16.7	16.2
78	21.2	20.5	19.9	19.2	18.6	18.0	17.5	16.9	16.4	15.9
79	21.1	20.4	19.7	19.0	18.4	17.8	17.2	16.7	16.1	15.6
80	21.0	20.2	19.5	18.9	18.2	17.6	17.0	16.4	15.9	15.4
81	20.8	20.1	19.4	18.7	18.1	17.4	16.8	16.2	15.7	15.1
82	20.7	20.0	19.3	18.6	17.9	17.3	16.6	16.0	15.5	14.9
83	20.6	19.9	19.2	18.5	17.8	17.1	16.5	15.9	15.3	14.7
84	20.5	19.8	19.1	18.4	17.7	17.0	16.3	15.7	15.1	14.5
85	20.5	19.7	19.0	18.3	17.6	16.9	16.2	15.6	15.0	14.4
86	20.4	19.6	18.9	18.2	17.5	16.8	16.1	15.5	14.8	14.2
87	20.4	19.6	18.8	18.1	17.4	16.7	16.0	15.4	14.7	14.1
88	20.3	19.5	18.8	18.0	17.3	16.6	15.9	15.3	14.6	14.0
89	20.3	19.5	18.7	18.0	17.2	16.5	15.8	15.2	14.5	13.9
90	20.2	19.4	18.7	17.9	17.2	16.5	15.8	15.1	14.5	13.8
91	20.2	19.4	18.6	17.9	17.1	16.4	15.7	15.0	14.4	13.7
92	20.2	19.4	18.6	17.8	17.1	16.4	15.7	15.0	14.3	13.7
93	20.1	19.3	18.6	17.8	17.1	16.3	15.6	14.9	14.3	13.6
94	20.1	19.3	18.5	17.8	17.0	16.3	15.6	14.9	14.2	13.6
95	20.1	19.3	18.5	17.8	17.0	16.3	15.6	14.9	14.2	13.5
96	20.1	19.3	18.5	17.7	17.0	16.2	15.5	14.8	14.2	13.5
97	20.1	19.3	18.5	17.7	17.0	16.2	15.5	14.8	14.1	13.5
98	20.1	19.3	18.5	17.7	16.9	16.2	15.5	14.8	14.1	13.4
99	20.0	19.2	18.5	17.7	16.9	16.2	15.5	14.7	14.1	13.4
100	20.0	19.2	18.4	17.7	16.9	16.2	15.4	14.7	14.0	13.4
101	20.0	19.2	18.4	17.7	16.9	16.1	15.4	14.7	14.0	13.3
102	20.0	19.2	18.4	17.6	16.9	16.1	15.4	14.7	14.0	13.3
103	20.0	19.2	18.4	17.6	16.9	16.1	15.4	14.7	14.0	13.3
104	20.0	19.2	18.4	17.6	16.9	16.1	15.4	14.7	14.0	13.3
105	20.0	19.2	18.4	17.6	16.8	16.1	15.4	14.6	13.9	13.3
106	20.0	19.2	18.4	17.6	16.8	16.1	15.3	14.6	13.9	13.3
107	20.0	19.2	18.4	17.6	16.8	16.1	15.3	14.6	13.9	13.2
108	20.0	19.2	18.4	17.6	16.8	16.1	15.3	14.6	13.9	13.2
109	20.0	19.2	18.4	17.6	16.8	16.1	15.3	14.6	13.9	13.2
110	20.0	19.2	18.4	17.6	16.8	16.1	15.3	14.6	13.9	13.2
111	20.0	19.2	18.4	17.6	16.8	16.0	15.3	14.6	13.9	13.2
112	20.0	19.2	18.4	17.6	16.8	16.0	15.3	14.6	13.9	13.2
113	20.0	19.2	18.4	17.6	16.8	16.0	15.3	14.6	13.9	13.2
114	20.0	19.2	18.4	17.6	16.8	16.0	15.3	14.6	13.9	13.2
115	20.0	19.2	18.4	17.6	16.8	16.0	15.3	14.6	13.9	13.2



Table VI.— Ordinary Joint Life and Last Survivor Annuities Two Lives— Expected Return Multiples										
AGES	75	76	77	78	79	80	81	82	83	84
75	16.5	16.1	15.8	15.4	15.1	14.9	14.6	14.4	14.2	14.0
76	16.1	15.7	15.4	15.0	14.7	14.4	14.1	13.9	13.7	13.5
77	15.8	15.4	15.0	14.6	14.3	14.0	13.7	13.4	13.2	13.0
78	15.4	15.0	14.6	14.2	13.9	13.5	13.2	13.0	12.7	12.5
79	15.1	14.7	14.3	13.9	13.5	13.2	12.8	12.5	12.3	12.0
80	14.9	14.4	14.0	13.5	13.2	12.8	12.5	12.2	11.9	11.6
81	14.6	14.1	13.7	13.2	12.8	12.5	12.1	11.8	11.5	11.2
82	14.4	13.9	13.4	13.0	12.5	12.2	11.8	11.5	11.1	10.9
83	14.2	13.7	13.2	12.7	12.3	11.9	11.5	11.1	10.8	10.5
84	14.0	13.5	13.0	12.5	12.0	11.6	11.2	10.9	10.5	10.2
85	13.8	13.3	12.8	12.3	11.8	11.4	11.0	10.6	10.2	9.9
86	13.7	13.1	12.6	12.1	11.6	11.2	10.8	10.4	10.0	9.7
87	13.5	13.0	12.4	11.9	11.4	11.0	10.6	10.1	9.8	9.4
88	13.4	12.8	12.3	11.8	11.3	10.8	10.4	10.0	9.6	9.2
89	13.3	12.7	12.2	11.6	11.1	10.7	10.2	9.8	9.4	9.0
90	13.2	12.6	12.1	11.5	11.0	10.5	10.1	9.6	9.2	8.8
91	13.1	12.5	12.0	11.4	10.9	10.4	9.9	9.5	9.1	8.7
92	13.1	12.5	11.9	11.3	10.8	10.3	9.8	9.4	8.9	8.5
93	13.0	12.4	11.8	11.3	10.7	10.2	9.7	9.3	8.8	8.4
94	12.9	12.3	11.7	11.2	10.6	10.1	9.6	9.2	8.7	8.3
95	12.9	12.3	11.7	11.1	10.6	10.1	9.6	9.1	8.6	8.2
96	12.9	12.2	11.6	11.1	10.5	10.0	9.5	9.0	8.5	8.1
97	12.8	12.2	11.6	11.0	10.5	9.9	9.4	8.9	8.5	8.0
98	12.8	12.2	11.5	11.0	10.4	9.9	9.4	8.9	8.4	8.0
99	12.7	12.1	11.5	10.9	10.4	9.8	9.3	8.8	8.3	7.9
100	12.7	12.1	11.5	10.9	10.3	9.8	9.2	8.7	8.3	7.8
101	12.7	12.1	11.4	10.8	10.3	9.7	9.2	8.7	8.2	7.8
102	12.7	12.0	11.4	10.8	10.2	9.7	9.2	8.7	8.2	7.7
103	12.6	12.0	11.4	10.8	10.2	9.7	9.1	8.6	8.1	7.7
104	12.6	12.0	11.4	10.8	10.2	9.6	9.1	8.6	8.1	7.6
105	12.6	12.0	11.3	10.7	10.2	9.6	9.1	8.5	8.0	7.6
106	12.6	11.9	11.3	10.7	10.1	9.6	9.0	8.5	8.0	7.5
107	12.6	11.9	11.3	10.7	10.1	9.6	9.0	8.5	8.0	7.5
108	12.6	11.9	11.3	10.7	10.1	9.5	9.0	8.5	8.0	7.5
109	12.6	11.9	11.3	10.7	10.1	9.5	9.0	8.4	7.9	7.5
110	12.6	11.9	11.3	10.7	10.1	9.5	9.0	8.4	7.9	7.4
111	12.5	11.9	11.3	10.7	10.1	9.5	8.9	8.4	7.9	7.4
112	12.5	11.9	11.3	10.6	10.1	9.5	8.9	8.4	7.9	7.4
113	12.5	11.9	11.2	10.6	10.0	9.5	8.9	8.4	7.9	7.4
114	12.5	11.9	11.2	10.6	10.0	9.5	8.9	8.4	7.9	7.4
115	12.5	11.9	11.2	10.6	10.0	9.5	8.9	8.4	7.9	7.4

Table VI.— Ordinary Joint Life and Last Survivor Annuities Two Lives— Expected Return Multiples										
AGES	85	86	87	88	89	90	91	92	93	94
85	9.6	9.3	9.1	8.9	8.7	8.5	8.3	8.2	8.0	7.9
86	9.3	9.1	8.8	8.6	8.3	8.2	8.0	7.8	7.7	7.6
87	9.1	8.8	8.5	8.3	8.1	7.9	7.7	7.5	7.4	7.2
88	8.9	8.6	8.3	8.0	7.8	7.6	7.4	7.2	7.1	6.9
89	8.7	8.3	8.1	7.8	7.5	7.3	7.1	6.9	6.8	6.6
90	8.5	8.2	7.9	7.6	7.3	7.1	6.9	6.7	6.5	6.4
91	8.3	8.0	7.7	7.4	7.1	6.9	6.7	6.5	6.3	6.2
92	8.2	7.8	7.5	7.2	6.9	6.7	6.5	6.3	6.1	5.9
93	8.0	7.7	7.4	7.1	6.8	6.5	6.3	6.1	5.9	5.8
94	7.9	7.6	7.2	6.9	6.6	6.4	6.2	5.9	5.8	5.6
95	7.8	7.5	7.1	6.8	6.5	6.3	6.0	5.8	5.6	5.4
96	7.7	7.3	7.0	6.7	6.4	6.1	5.9	5.7	5.5	5.3
97	7.6	7.3	6.9	6.6	6.3	6.0	5.8	5.5	5.3	5.1
98	7.6	7.2	6.8	6.5	6.2	5.9	5.6	5.4	5.2	5.0
99	7.5	7.1	6.7	6.4	6.1	5.8	5.5	5.3	5.1	4.9
100	7.4	7.0	6.6	6.3	6.0	5.7	5.4	5.2	5.0	4.8
101	7.3	6.9	6.6	6.2	5.9	5.6	5.3	5.1	4.9	4.7
102	7.3	6.9	6.5	6.2	5.8	5.5	5.3	5.0	4.8	4.6
103	7.2	6.8	6.4	6.1	5.8	5.5	5.2	4.9	4.7	4.5
104	7.2	6.8	6.4	6.0	5.7	5.4	5.1	4.8	4.6	4.4
105	7.1	6.7	6.3	6.0	5.6	5.3	5.0	4.8	4.5	4.3
106	7.1	6.7	6.3	5.9	5.6	5.3	5.0	4.7	4.5	4.2
107	7.1	6.6	6.2	5.9	5.5	5.2	4.9	4.6	4.4	4.2
108	7.0	6.6	6.2	5.8	5.5	5.2	4.9	4.6	4.3	4.1
109	7.0	6.6	6.2	5.8	5.5	5.1	4.8	4.5	4.3	4.1
110	7.0	6.6	6.2	5.8	5.4	5.1	4.8	4.5	4.3	4.0
111	7.0	6.5	6.1	5.7	5.4	5.1	4.8	4.5	4.2	4.0
112	7.0	6.5	6.1	5.7	5.4	5.0	4.7	4.4	4.2	3.9
113	6.9	6.5	6.1	5.7	5.4	5.0	4.7	4.4	4.2	3.9
114	6.9	6.5	6.1	5.7	5.3	5.0	4.7	4.4	4.1	3.9
115	6.9	6.5	6.1	5.7	5.3	5.0	4.7	4.4	4.1	3.9



Table VI. — Ordinary Joint Life and Last Survivor Annuities Two Lives — Expected Return Multiples										
AGES	95	96	97	98	99	100	101	102	103	104
95	5.3	5.1	5.0	4.8	4.7	4.6	4.5	4.4	4.3	4.2
96	5.1	5.0	4.8	4.7	4.5	4.4	4.3	4.2	4.1	4.0
97	5.0	4.8	4.7	4.5	4.4	4.3	4.1	4.0	3.9	3.8
98	4.8	4.7	4.5	4.4	4.2	4.1	4.0	3.9	3.8	3.7
99	4.7	4.5	4.4	4.2	4.1	4.0	3.8	3.7	3.6	3.5
100	4.6	4.4	4.3	4.1	4.0	3.8	3.7	3.6	3.5	3.3
101	4.5	4.3	4.1	4.0	3.8	3.7	3.6	3.4	3.3	3.2
102	4.4	4.2	4.0	3.9	3.7	3.6	3.4	3.3	3.2	3.1
103	4.3	4.1	3.9	3.8	3.6	3.5	3.3	3.2	3.0	2.9
104	4.2	4.0	3.8	3.7	3.5	3.3	3.2	3.1	2.9	2.8
105	4.1	3.9	3.7	3.6	3.4	3.2	3.1	2.9	2.8	2.7
106	4.0	3.8	3.6	3.5	3.3	3.1	3.0	2.8	2.7	2.5
107	4.0	3.8	3.6	3.4	3.2	3.1	2.9	2.7	2.6	2.4
108	3.9	3.7	3.5	3.3	3.1	3.0	2.8	2.7	2.5	2.3
109	3.8	3.6	3.4	3.3	3.1	2.9	2.7	2.6	2.4	2.3
110	3.8	3.6	3.4	3.2	3.0	2.8	2.7	2.5	2.3	2.2
111	3.8	3.5	3.3	3.2	3.0	2.8	2.6	2.4	2.3	2.1
112	3.7	3.5	3.3	3.1	2.9	2.8	2.6	2.4	2.2	2.1
113	3.7	3.5	3.3	3.1	2.9	2.7	2.5	2.4	2.2	2.0
114	3.7	3.5	3.3	3.1	2.9	2.7	2.5	2.3	2.1	2.0
115	3.7	3.4	3.2	3.0	2.8	2.7	2.5	2.3	2.1	1.9

Table VI.— Ordinary Joint Life and Last Survivor Annuities Two Lives— Expected Return Multiples											
AGES	105	106	107	108	109	110	111	112	113	114	115
105	2.5	2.4	2.3	2.2	2.1	2.0	2.0	1.9	1.8	1.8	1.8
106	2.4	2.3	2.2	2.1	2.0	1.9	1.8	1.7	1.7	1.6	1.6
107	2.3	2.2	2.1	1.9	1.8	1.7	1.7	1.6	1.5	1.5	1.4
108	2.2	2.1	1.9	1.8	1.7	1.6	1.5	1.5	1.4	1.3	1.3
109	2.1	2.0	1.8	1.7	1.6	1.5	1.4	1.3	1.3	1.2	1.1
110	2.0	1.9	1.7	1.6	1.5	1.4	1.3	1.2	1.1	1.1	1.0
111	2.0	1.8	1.7	1.5	1.4	1.3	1.2	1.1	1.0	.9	.9
112	1.9	1.7	1.6	1.5	1.3	1.2	1.1	1.0	.9	.8	.8
113	1.8	1.7	1.5	1.4	1.3	1.1	1.0	.9	.8	.7	.7
114	1.8	1.6	1.5	1.3	1.2	1.1	.9	.8	.7	.6	.6
115	1.8	1.6	1.4	1.3	1.1	1.0	.9	.8	.7	.6	.5



Table VIA.—Annuities for Joint Life Only Two Lives—Expected Return Multiples										
AGES	5	6	7	8	9	10	11	12	13	14
5	69.5	69.0	68.4	67.9	67.3	66.7	66.1	65.5	64.8	64.1
6	69.0	68.5	68.0	67.5	66.9	66.4	65.8	65.1	64.5	63.8
7	68.4	68.0	67.5	67.0	66.5	66.0	65.4	64.8	64.2	63.5
8	67.9	67.5	67.0	66.6	66.1	65.5	65.0	64.4	63.8	63.2
9	67.3	66.9	66.5	66.1	65.6	65.1	64.6	64.0	63.4	62.8
10	66.7	66.4	66.0	65.5	65.1	64.6	64.1	63.6	63.0	62.5
11	66.1	65.8	65.4	65.0	64.6	64.1	63.6	63.1	62.6	62.1
12	65.5	65.1	64.8	64.4	64.0	63.6	63.1	62.7	62.2	61.7
13	64.8	64.5	64.2	63.8	63.4	63.0	62.6	62.2	61.7	61.2
14	64.1	63.8	63.5	63.2	62.8	62.5	62.1	61.7	61.2	60.7
15	63.4	63.1	62.9	62.6	62.2	61.9	61.5	61.1	60.7	60.2
16	62.7	62.4	62.2	61.9	61.6	61.3	60.9	60.5	60.1	59.7
17	61.9	61.7	61.5	61.2	60.9	60.6	60.3	59.9	59.6	59.2
18	61.2	61.0	60.7	60.5	60.2	60.0	59.7	59.3	59.0	58.6
19	60.4	60.2	60.0	59.8	59.5	59.3	59.0	58.7	58.4	58.0
20	59.6	59.4	59.2	59.0	58.8	58.6	58.3	58.0	57.7	57.4
21	58.8	58.7	58.5	58.3	58.1	57.8	57.6	57.3	57.1	56.8
22	58.0	57.8	57.7	57.5	57.3	57.1	56.9	56.6	56.4	56.1
23	57.2	57.0	56.9	56.7	56.5	56.4	56.1	55.9	55.7	55.4
24	56.3	56.2	56.1	55.9	55.8	55.6	55.4	55.2	55.0	54.7
25	55.5	55.4	55.2	55.1	55.0	54.8	54.6	54.4	54.2	54.0
26	54.6	54.5	54.4	54.3	54.1	54.0	53.8	53.7	53.5	53.3
27	53.8	53.7	53.6	53.4	53.3	53.2	53.0	52.9	52.7	52.5
28	52.9	52.8	52.7	52.6	52.5	52.4	52.2	52.1	51.9	51.7
29	52.0	51.9	51.8	51.7	51.6	51.5	51.4	51.3	51.1	51.0
30	51.1	51.0	51.0	50.9	50.8	50.7	50.6	50.4	50.3	50.2
31	50.2	50.2	50.1	50.0	49.9	49.8	49.7	49.6	49.5	49.3
32	49.3	49.3	49.2	49.1	49.0	49.0	48.9	48.8	48.6	48.5
33	48.4	48.4	48.3	48.2	48.2	48.1	48.0	47.9	47.9	47.7
34	47.5	47.5	47.4	47.4	47.3	47.2	47.1	47.0	47.0	46.8
35	46.6	46.6	46.5	46.5	46.4	46.3	46.3	46.2	46.1	46.0
36	45.7	45.7	45.6	45.6	45.5	45.4	45.4	45.3	45.2	45.1
37	44.8	44.7	44.7	44.6	44.6	44.5	44.5	44.4	44.3	44.3
38	43.9	43.8	43.8	43.7	43.7	43.6	43.6	43.5	43.5	43.4
39	42.9	42.9	42.9	42.8	42.8	42.7	42.7	42.6	42.6	42.5
40	42.0	42.0	42.0	41.9	41.9	41.8	41.8	41.7	41.7	41.6
41	41.1	41.1	41.0	41.0	41.0	40.9	40.9	40.8	40.8	40.7
42	40.2	40.1	40.1	40.1	40.1	40.0	40.0	39.9	39.9	39.8
43	39.2	39.2	39.2	39.2	39.1	39.1	39.1	39.0	39.0	39.0
44	38.3	38.3	38.3	38.3	38.2	38.2	38.2	38.1	38.1	38.1
45	37.4	37.4	37.4	37.3	37.3	37.3	37.3	37.2	37.2	37.2
46	36.5	36.5	36.5	36.4	36.4	36.4	36.4	36.3	36.3	36.3
47	35.6	35.6	35.5	35.5	35.5	35.5	35.5	35.4	35.4	35.4
48	34.7	34.7	34.6	34.6	34.6	34.6	34.6	34.5	34.5	34.5
49	33.8	33.8	33.7	33.7	33.7	33.7	33.7	33.7	33.6	33.6
50	32.9	32.9	32.8	32.8	32.8	32.8	32.8	32.8	32.7	32.7
51	32.0	32.0	31.9	31.9	31.9	31.9	31.9	31.9	31.9	31.8
52	31.1	31.1	31.1	31.0	31.0	31.0	31.0	31.0	31.0	30.9
53	30.2	30.2	30.2	30.2	30.1	30.1	30.1	30.1	30.1	30.1
54	29.3	29.3	29.3	29.3	29.3	29.2	29.2	29.2	29.2	29.2
55	28.4	28.4	28.4	28.4	28.4	28.4	28.4	28.3	28.3	28.3
56	27.5	27.5	27.5	27.5	27.5	27.5	27.5	27.5	27.5	27.5
57	26.7	26.7	26.7	26.6	26.6	26.6	26.6	26.6	26.6	26.6
58	25.8	25.8	25.8	25.8	25.8	25.8	25.8	25.7	25.7	25.7
59	24.9	24.9	24.9	24.9	24.9	24.9	24.9	24.9	24.9	24.9
60	24.1	24.1	24.1	24.1	24.1	24.0	24.0	24.0	24.0	24.0
61	23.2	23.2	23.2	23.2	23.2	23.2	23.2	23.2	23.2	23.2
62	22.4	22.4	22.4	22.4	22.4	22.4	22.3	22.3	22.3	22.3

Table VIA. —Annuities for Joint Life Only Two Lives—Expected Return Multiples										
AGES	5	6	7	8	9	10	11	12	13	14
63	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5
64	20.7	20.7	20.7	20.7	20.7	20.7	20.7	20.7	20.7	20.7
65	19.9	19.9	19.9	19.9	19.9	19.9	19.9	19.9	19.9	19.9
66	19.1	19.1	19.1	19.1	19.1	19.1	19.1	19.1	19.1	19.1
67	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3
68	17.5	17.5	17.5	17.5	17.5	17.5	17.5	17.5	17.5	17.5
69	16.8	16.8	16.8	16.7	16.7	16.7	16.7	16.7	16.7	16.7
70	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0
71	15.3	15.3	15.3	15.3	15.3	15.3	15.3	15.3	15.3	15.2
72	14.6	14.6	14.5	14.5	14.5	14.5	14.5	14.5	14.5	14.5
73	13.9	13.9	13.8	13.8	13.8	13.8	13.8	13.8	13.8	13.8
74	13.2	13.2	13.2	13.2	13.2	13.2	13.2	13.2	13.2	13.2
75	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5
76	11.9	11.9	11.8	11.8	11.8	11.8	11.8	11.8	11.8	11.8
77	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2
78	10.6	10.6	10.6	10.6	10.6	10.6	10.6	10.6	10.6	10.6
79	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
80	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.4	9.4
81	8.9	8.9	8.9	8.9	8.9	8.9	8.9	8.9	8.9	8.9
82	8.4	8.4	8.4	8.4	8.4	8.4	8.4	8.4	8.4	8.4
83	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.9
84	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4
85	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9
86	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5
87	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1
88	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7
89	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3
90	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
91	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7
92	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4
93	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1
94	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9
95	3.7	3.7	3.7	3.7	3.7	3.7	3.6	3.6	3.6	3.6
96	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4
97	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2
98	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
99	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8
100	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7
101	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
102	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3
103	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1
104	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
105	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
106	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
107	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
108	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
109	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
110	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
111	.9	.9	.9	.9	.9	.9	.9	.9	.9	.9
112	.8	.8	.8	.8	.8	.8	.8	.8	.8	.8
113	.7	.7	.7	.7	.7	.7	.7	.7	.7	.7
114	.6	.6	.6	.6	.6	.6	.6	.6	.6	.6
115	.5	.5	.5	.5	.5	.5	.5	.5	.5	.5



Table VIA.—Annuities for Joint Life Only Two Lives—Expected Return Multiples										
AGES	15	16	17	18	19	20	21	22	23	24
15	59.8	59.3	58.8	58.2	57.6	57.0	56.4	55.8	55.1	54.5
16	59.3	58.8	58.3	57.8	57.2	56.7	56.1	55.5	54.8	54.2
17	58.8	58.3	57.8	57.3	56.8	56.3	55.7	55.1	54.5	53.9
18	58.2	57.8	57.3	56.9	56.4	55.9	55.3	54.7	54.2	53.5
19	57.6	57.2	56.8	56.4	55.9	55.4	54.9	54.4	53.8	53.2
20	57.0	56.7	56.3	55.9	55.4	54.9	54.5	53.9	53.4	52.8
21	56.4	56.1	55.7	55.3	54.9	54.5	54.0	53.5	53.0	52.4
22	55.8	55.5	55.1	54.7	54.4	53.9	53.5	53.0	52.5	52.0
23	55.1	54.8	54.5	54.2	53.8	53.4	53.0	52.5	52.1	51.6
24	54.5	54.2	53.9	53.5	53.2	52.8	52.4	52.0	51.6	51.1
25	53.8	53.5	53.2	52.9	52.6	52.2	51.9	51.5	51.1	50.6
26	53.0	52.8	52.5	52.3	52.0	51.6	51.3	50.9	50.5	50.1
27	52.3	52.1	51.8	51.6	51.3	51.0	50.7	50.3	50.0	49.6
28	51.5	51.3	51.1	50.9	50.6	50.3	50.0	49.7	49.4	49.0
29	50.8	50.6	50.4	50.2	49.9	49.7	49.4	49.1	48.8	48.4
30	50.0	49.8	49.6	49.4	49.2	49.0	48.7	48.4	48.1	47.8
31	49.2	49.0	48.9	48.7	48.5	48.3	48.0	47.8	47.5	47.2
32	48.4	48.2	48.1	47.9	47.7	47.5	47.3	47.1	46.8	46.5
33	47.6	47.4	47.3	47.1	47.0	46.8	46.6	46.3	46.1	45.9
34	46.7	46.6	46.5	46.3	46.2	46.0	45.8	45.6	45.4	45.2
35	45.9	45.8	45.7	45.5	45.4	45.2	45.1	44.9	44.7	44.4
36	45.0	44.9	44.8	44.7	44.6	44.4	44.3	44.1	43.9	43.7
37	44.2	44.1	44.0	43.9	43.8	43.6	43.5	43.3	43.2	43.0
38	43.3	43.2	43.1	43.0	42.9	42.8	42.7	42.5	42.4	42.2
39	42.4	42.4	42.3	42.2	42.1	42.0	41.9	41.7	41.6	41.4
40	41.6	41.5	41.4	41.3	41.2	41.1	41.0	40.9	40.8	40.6
41	40.7	40.6	40.5	40.5	40.4	40.3	40.2	40.1	40.0	39.8
42	39.8	39.7	39.7	39.6	39.5	39.4	39.4	39.3	39.1	39.0
43	38.9	38.9	38.8	38.7	38.7	38.6	38.5	38.4	38.3	38.2
44	38.0	38.0	37.9	37.9	37.8	37.7	37.7	37.6	37.5	37.4
45	37.1	37.1	37.0	37.0	36.9	36.9	36.8	36.7	36.6	36.5
46	36.2	36.2	36.2	36.1	36.1	36.0	35.9	35.9	35.8	35.7
47	35.3	35.3	35.3	35.2	35.2	35.1	35.1	35.0	34.9	34.9
48	34.5	34.4	34.4	34.4	34.3	34.3	34.2	34.2	34.1	34.0
49	33.6	33.5	33.5	33.5	33.4	33.4	33.4	33.3	33.2	33.2
50	32.7	32.7	32.6	32.6	32.6	32.5	32.5	32.4	32.4	32.3
51	31.8	31.8	31.8	31.7	31.7	31.7	31.6	31.6	31.5	31.5
52	30.9	30.9	30.9	30.9	30.8	30.8	30.8	30.7	30.7	30.6
53	30.0	30.0	30.0	30.0	30.0	29.9	29.9	29.9	29.8	29.8
54	29.2	29.2	29.1	29.1	29.1	29.1	29.0	29.0	29.0	28.9
55	28.3	28.3	28.3	28.3	28.2	28.2	28.2	28.2	28.1	28.1
56	27.4	27.4	27.4	27.4	27.4	27.3	27.3	27.3	27.3	27.2
57	26.6	26.6	26.5	26.5	26.5	26.5	26.5	26.5	26.4	26.4
58	25.7	25.7	25.7	25.7	25.7	25.6	25.6	25.6	25.6	25.6
59	24.9	24.8	24.8	24.8	24.8	24.8	24.8	24.8	24.7	24.7
60	24.0	24.0	24.0	24.0	24.0	23.9	23.9	23.9	23.9	23.9
61	23.2	23.2	23.1	23.1	23.1	23.1	23.1	23.1	23.1	23.0
62	22.3	22.3	22.3	22.3	22.3	22.3	22.3	22.2	22.2	22.2
63	21.5	21.5	21.5	21.5	21.5	21.4	21.4	21.4	21.4	21.4
64	20.7	20.7	20.7	20.6	20.6	20.6	20.6	20.6	20.6	20.6
65	19.9	19.8	19.8	19.8	19.8	19.8	19.8	19.8	19.8	19.8
66	19.1	19.0	19.0	19.0	19.0	19.0	19.0	19.0	19.0	19.0
67	18.3	18.3	18.3	18.3	18.2	18.2	18.2	18.2	18.2	18.2
68	17.5	17.5	17.5	17.5	17.5	17.5	17.5	17.5	17.4	17.4
69	16.7	16.7	16.7	16.7	16.7	16.7	16.7	16.7	16.7	16.7
70	16.0	16.0	16.0	16.0	16.0	16.0	15.9	15.9	15.9	15.9
71	15.2	15.2	15.2	15.2	15.2	15.2	15.2	15.2	15.2	15.2
72	14.5	14.5	14.5	14.5	14.5	14.5	14.5	14.5	14.5	14.5

Table VIA.—Annuities for Joint Life Only Two Lives—Expected Return Multiples										
AGES	15	16	17	18	19	20	21	22	23	24
73	13.8	13.8	13.8	13.8	13.8	13.8	13.8	13.8	13.8	13.8
74	13.2	13.1	13.1	13.1	13.1	13.1	13.1	13.1	13.1	13.1
75	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5
76	11.8	11.8	11.8	11.8	11.8	11.8	11.8	11.8	11.8	11.8
77	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2
78	10.6	10.6	10.6	10.6	10.6	10.6	10.6	10.6	10.6	10.6
79	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
80	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4
81	8.9	8.9	8.9	8.9	8.9	8.9	8.9	8.9	8.9	8.9
82	8.4	8.4	8.4	8.4	8.4	8.4	8.4	8.4	8.4	8.4
83	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.8	7.8
84	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4
85	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9
86	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5
87	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1
88	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7
89	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3
90	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
91	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7
92	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4
93	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1
94	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9
95	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6
96	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4
97	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2
98	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
99	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8
100	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7
101	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
102	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3
103	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1
104	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
105	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
106	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
107	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
108	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
109	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
110	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
111	.9	.9	.9	.9	.9	.9	.9	.9	.9	.9
112	.8	.8	.8	.8	.8	.8	.8	.8	.8	.8
113	.7	.7	.7	.7	.7	.7	.7	.7	.7	.7
114	.6	.6	.6	.6	.6	.6	.6	.6	.6	.6
115	.5	.5	.5	.5	.5	.5	.5	.5	.5	.5



Table VIA.—Annuities for Joint Life Only Two Lives—Expected Return Multiples										
AGES	25	26	27	28	29	30	31	32	33	34
25	50.2	49.7	49.2	48.6	48.1	47.5	46.9	46.2	45.6	44.9
26	49.7	49.2	48.7	48.2	47.7	47.1	46.5	45.9	45.3	44.6
27	49.2	48.7	48.3	47.8	47.3	46.7	46.2	45.6	45.0	44.3
28	48.6	48.2	47.8	47.3	46.8	46.3	45.8	45.2	44.6	44.0
29	48.1	47.7	47.3	46.8	46.4	45.9	45.4	44.8	44.3	43.7
30	47.5	47.1	46.7	46.3	45.9	45.4	44.9	44.4	43.9	43.3
31	46.9	46.5	46.2	45.8	45.4	44.9	44.5	44.0	43.5	42.9
32	46.2	45.9	45.6	45.2	44.8	44.4	44.0	43.5	43.0	42.5
33	45.6	45.3	45.0	44.6	44.3	43.9	43.5	43.0	42.6	42.1
34	44.9	44.6	44.3	44.0	43.7	43.3	42.9	42.5	42.1	41.6
35	44.2	44.0	43.7	43.4	43.1	42.7	42.4	42.0	41.6	41.1
36	43.5	43.3	43.0	42.7	42.4	42.1	41.8	41.4	41.0	40.6
37	42.8	42.5	42.3	42.1	41.8	41.5	41.2	40.8	40.5	40.1
38	42.0	41.8	41.6	41.4	41.1	40.8	40.6	40.2	39.9	39.5
39	41.3	41.1	40.9	40.7	40.4	40.2	39.9	39.6	39.3	39.0
40	40.5	40.3	40.1	39.9	39.7	39.5	39.2	39.0	38.7	38.4
41	39.7	39.5	39.4	39.2	39.0	38.8	38.5	38.3	38.0	37.7
42	38.9	38.8	38.6	38.4	38.3	38.1	37.8	37.6	37.4	37.1
43	38.1	38.0	37.8	37.7	37.5	37.3	37.1	36.9	36.7	36.4
44	37.3	37.2	37.0	36.9	36.7	36.6	36.4	36.2	36.0	35.8
45	36.5	36.3	36.2	36.1	36.0	35.8	35.6	35.5	35.3	35.1
46	35.6	35.5	35.4	35.3	35.2	35.0	34.9	34.7	34.5	34.4
47	34.8	34.7	34.6	34.5	34.4	34.3	34.1	34.0	33.8	33.6
48	34.0	33.9	33.8	33.7	33.6	33.5	33.4	33.2	33.1	32.9
49	33.1	33.0	33.0	32.9	32.8	32.7	32.6	32.4	32.3	32.2
50	32.3	32.2	32.1	32.1	32.0	31.9	31.8	31.7	31.5	31.4
51	31.4	31.4	31.3	31.2	31.2	31.1	31.0	30.9	30.8	30.6
52	30.6	30.5	30.5	30.4	30.3	30.3	30.2	30.1	30.0	29.9
53	29.7	29.7	29.6	29.6	29.5	29.5	29.4	29.3	29.2	29.1
54	28.9	28.9	28.8	28.8	28.7	28.6	28.6	28.5	28.4	28.3
55	28.1	28.0	28.0	27.9	27.9	27.8	27.8	27.7	27.6	27.5
56	27.2	27.2	27.1	27.1	27.0	27.0	26.9	26.9	26.8	26.7
57	26.4	26.3	26.3	26.3	26.2	26.2	26.1	26.1	26.0	25.9
58	25.5	25.5	25.5	25.4	25.4	25.4	25.3	25.3	25.2	25.1
59	24.7	24.7	24.6	24.6	24.6	24.5	24.5	24.5	24.4	24.3
60	23.9	23.8	23.8	23.8	23.8	23.7	23.7	23.6	23.6	23.5
61	23.0	23.0	23.0	23.0	22.9	22.9	22.9	22.8	22.8	22.7
62	22.2	22.2	22.2	22.1	22.1	22.1	22.1	22.0	22.0	21.9
63	21.4	21.4	21.3	21.3	21.3	21.3	21.3	21.2	21.2	21.2
64	20.6	20.6	20.5	20.5	20.5	20.5	20.5	20.4	20.4	20.4
65	19.8	19.8	19.7	19.7	19.7	19.7	19.7	19.6	19.6	19.6
66	19.0	19.0	19.0	18.9	18.9	18.9	18.9	18.9	18.8	18.8
67	18.2	18.2	18.2	18.2	18.2	18.1	18.1	18.1	18.1	18.1
68	17.4	17.4	17.4	17.4	17.4	17.4	17.4	17.3	17.3	17.3
69	16.7	16.7	16.7	16.6	16.6	16.6	16.6	16.6	16.6	16.6
70	15.9	15.9	15.9	15.9	15.9	15.9	15.9	15.9	15.8	15.8
71	15.2	15.2	15.2	15.2	15.2	15.2	15.2	15.1	15.1	15.1
72	14.5	14.5	14.5	14.5	14.5	14.5	14.5	14.4	14.4	14.4
73	13.8	13.8	13.8	13.8	13.8	13.8	13.8	13.8	13.7	13.7
74	13.1	13.1	13.1	13.1	13.1	13.1	13.1	13.1	13.1	13.1
75	12.5	12.5	12.5	12.4	12.4	12.4	12.4	12.4	12.4	12.4
76	11.8	11.8	11.8	11.8	11.8	11.8	11.8	11.8	11.8	11.8
77	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.1
78	10.6	10.6	10.6	10.6	10.6	10.6	10.6	10.6	10.6	10.5
79	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
80	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4
81	8.9	8.9	8.9	8.9	8.9	8.9	8.9	8.9	8.9	8.9
82	8.4	8.4	8.4	8.4	8.4	8.4	8.4	8.4	8.4	8.4

Table VIA.—Annuities for Joint Life Only Two Lives—Expected Return Multiples										
AGES	25	26	27	28	29	30	31	32	33	34
83	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8
84	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4
85	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9
86	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5
87	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1
88	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7
89	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3
90	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
91	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7
92	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4
93	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1
94	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9
95	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6
96	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4
97	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2
98	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
99	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8
100	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7
101	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
102	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3
103	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1
104	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
105	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
106	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
107	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
108	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
109	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
110	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
111	.9	.9	.9	.9	.9	.9	.9	.9	.9	.9
112	.8	.8	.8	.8	.8	.8	.8	.8	.8	.8
113	.7	.7	.7	.7	.7	.7	.7	.7	.7	.7
114	.6	.6	.6	.6	.6	.6	.6	.6	.6	.6
115	.5	.5	.5	.5	.5	.5	.5	.5	.5	.5



Table VIA.—Annuities for Joint Life Only Two Lives—Expected Return Multiples										
AGES	35	36	37	38	39	40	41	42	43	44
35	40.7	40.2	39.7	39.2	38.6	38.0	37.4	36.8	36.2	35.5
36	40.2	39.7	39.3	38.7	38.2	37.7	37.1	36.5	35.9	35.2
37	39.7	39.3	38.8	38.3	37.8	37.3	36.7	36.2	35.6	34.9
38	39.2	38.7	38.3	37.9	37.4	36.9	36.3	35.8	35.2	34.6
39	38.6	38.2	37.8	37.4	36.9	36.4	35.9	35.4	34.9	34.3
40	38.0	37.7	37.3	36.9	36.4	36.0	35.5	35.0	34.5	34.0
41	37.4	37.1	36.7	36.3	35.9	35.5	35.1	34.6	34.1	33.6
42	36.8	36.5	36.2	35.8	35.4	35.0	34.6	34.1	33.7	33.2
43	36.2	35.9	35.6	35.2	34.9	34.5	34.1	33.7	33.2	32.8
44	35.5	35.2	34.9	34.6	34.3	34.0	33.6	33.2	32.8	32.3
45	34.8	34.6	34.3	34.0	33.7	33.4	33.0	32.7	32.3	31.8
46	34.1	33.9	33.7	33.4	33.1	32.8	32.5	32.1	31.8	31.4
47	33.4	33.2	33.0	32.8	32.5	32.2	31.9	31.6	31.2	30.8
48	32.7	32.5	32.3	32.1	31.8	31.6	31.3	31.0	30.7	30.3
49	32.0	31.8	31.6	31.4	31.2	30.9	30.7	30.4	30.1	29.8
50	31.3	31.1	30.9	30.7	30.5	30.3	30.0	29.8	29.5	29.2
51	30.5	30.4	30.2	30.0	29.8	29.6	29.4	29.2	28.9	28.6
52	29.7	29.6	29.5	29.3	29.1	28.9	28.7	28.5	28.3	28.0
53	29.0	28.9	28.7	28.6	28.4	28.2	28.1	27.9	27.6	27.4
54	28.2	28.1	28.0	27.8	27.7	27.5	27.4	27.2	27.0	26.8
55	27.4	27.3	27.2	27.1	27.0	26.8	26.7	26.5	26.3	26.1
56	26.7	26.6	26.5	26.3	26.2	26.1	26.0	25.8	25.6	25.4
57	25.9	25.8	25.7	25.6	25.5	25.4	25.2	25.1	24.9	24.8
58	25.1	25.0	24.9	24.8	24.7	24.6	24.5	24.4	24.2	24.1
59	24.3	24.2	24.1	24.1	24.0	23.9	23.8	23.6	23.5	23.4
60	23.5	23.4	23.4	23.3	23.2	23.1	23.0	22.9	22.8	22.7
61	22.7	22.6	22.6	22.5	22.4	22.4	22.3	22.2	22.1	22.0
62	21.9	21.9	21.8	21.7	21.7	21.6	21.5	21.4	21.3	21.2
63	21.1	21.1	21.0	21.0	20.9	20.8	20.8	20.7	20.6	20.5
64	20.3	20.3	20.2	20.2	20.1	20.1	20.0	20.0	19.9	19.8
65	19.6	19.5	19.5	19.4	19.4	19.3	19.3	19.2	19.1	19.1
66	18.8	18.8	18.7	18.7	18.6	18.6	18.5	18.5	18.4	18.4
67	18.0	18.0	18.0	17.9	17.9	17.9	17.8	17.8	17.7	17.6
68	17.3	17.3	17.2	17.2	17.2	17.1	17.1	17.0	17.0	16.9
69	16.5	16.5	16.5	16.5	16.4	16.4	16.4	16.3	16.3	16.2
70	15.8	15.8	15.8	15.7	15.7	15.7	15.6	15.6	15.6	15.5
71	15.1	15.1	15.1	15.0	15.0	15.0	15.0	14.9	14.9	14.9
72	14.4	14.4	14.4	14.3	14.3	14.3	14.3	14.2	14.2	14.2
73	13.7	13.7	13.7	13.7	13.7	13.6	13.6	13.6	13.6	13.5
74	13.1	13.0	13.0	13.0	13.0	13.0	13.0	12.9	12.9	12.9
75	12.4	12.4	12.4	12.4	12.3	12.3	12.3	12.3	12.3	12.2
76	11.8	11.8	11.7	11.7	11.7	11.7	11.7	11.7	11.6	11.6
77	11.1	11.1	11.1	11.1	11.1	11.1	11.1	11.1	11.0	11.0
78	10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.4
79	10.0	10.0	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9
80	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.3	9.3	9.3
81	8.9	8.8	8.8	8.8	8.8	8.8	8.8	8.8	8.8	8.8
82	8.3	8.3	8.3	8.3	8.3	8.3	8.3	8.3	8.3	8.3
83	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8
84	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3
85	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9
86	6.5	6.5	6.5	6.5	6.4	6.4	6.4	6.4	6.4	6.4
87	6.1	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
88	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.6	5.6	5.6
89	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3
90	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
91	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.6	4.6
92	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4

Table VIA.—Annuities for Joint Life Only Two Lives—Expected Return Multiples										
AGES	35	36	37	38	39	40	41	42	43	44
93	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1
94	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9
95	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6
96	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4
97	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2
98	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
99	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8
100	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.6	2.6
101	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
102	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3
103	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1
104	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
105	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
106	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
107	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
108	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
109	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
110	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
111	.9	.9	.9	.9	.9	.9	.9	.9	.9	.9
112	.8	.8	.8	.8	.8	.8	.8	.8	.8	.8
113	.7	.7	.7	.7	.7	.7	.7	.7	.7	.7
114	.6	.6	.6	.6	.6	.6	.6	.6	.6	.6
115	.5	.5	.5	.5	.5	.5	.5	.5	.5	.5



Table VIA.—Annuities for Joint Life Only Two Lives—Expected Return Multiples										
AGES	45	46	47	48	49	50	51	52	53	54
45	31.4	30.9	30.5	30.0	29.4	28.9	28.3	27.7	27.1	26.5
46	30.9	30.5	30.0	29.6	29.1	28.5	28.0	27.4	26.9	26.3
47	30.5	30.0	29.6	29.2	28.7	28.2	27.7	27.1	26.6	26.0
48	30.0	29.6	29.2	28.7	28.3	27.8	27.3	26.8	26.3	25.7
49	29.4	29.1	28.7	28.3	27.9	27.4	26.9	26.5	25.9	25.4
50	28.9	28.5	28.2	27.8	27.4	27.0	26.5	26.1	25.6	25.1
51	28.3	28.0	27.7	27.3	26.9	26.5	26.1	25.7	25.2	24.7
52	27.7	27.4	27.1	26.8	26.5	26.1	25.7	25.3	24.8	24.4
53	27.1	26.9	26.6	26.3	25.9	25.6	25.2	24.8	24.4	24.0
54	26.5	26.3	26.0	25.7	25.4	25.1	24.7	24.4	24.0	23.6
55	25.9	25.7	25.4	25.1	24.9	24.6	24.2	23.9	23.5	23.2
56	25.2	25.0	24.8	24.6	24.3	24.0	23.7	23.4	23.1	22.7
57	24.6	24.4	24.2	24.0	23.7	23.5	23.2	22.9	22.6	22.2
58	23.9	23.7	23.5	23.3	23.1	22.9	22.6	22.4	22.1	21.7
59	23.2	23.1	22.9	22.7	22.5	22.3	22.1	21.8	21.5	21.2
60	22.5	22.4	22.2	22.1	21.9	21.7	21.5	21.2	21.0	20.7
61	21.8	21.7	21.6	21.4	21.2	21.1	20.9	20.6	20.4	20.2
62	21.1	21.0	20.9	20.7	20.6	20.4	20.2	20.0	19.8	19.6
63	20.4	20.3	20.2	20.1	19.9	19.8	19.6	19.4	19.2	19.0
64	19.7	19.6	19.5	19.4	19.3	19.1	19.0	18.8	18.6	18.5
65	19.0	18.9	18.8	18.7	18.6	18.5	18.3	18.2	18.0	17.9
66	18.3	18.2	18.1	18.0	17.9	17.8	17.7	17.6	17.4	17.3
67	17.6	17.5	17.4	17.3	17.3	17.2	17.1	16.9	16.8	16.7
68	16.9	16.8	16.7	16.7	16.6	16.5	16.4	16.3	16.2	16.1
69	16.2	16.1	16.1	16.0	15.9	15.8	15.8	15.7	15.6	15.4
70	15.5	15.4	15.4	15.3	15.3	15.2	15.1	15.0	14.9	14.8
71	14.8	14.8	14.7	14.7	14.6	14.5	14.5	14.4	14.3	14.2
72	14.1	14.1	14.1	14.0	14.0	13.9	13.8	13.8	13.7	13.6
73	13.5	13.5	13.4	13.4	13.3	13.3	13.2	13.2	13.1	13.0
74	12.8	12.8	12.8	12.7	12.7	12.7	12.6	12.6	12.5	12.4
75	12.2	12.2	12.2	12.1	12.1	12.1	12.0	12.0	11.9	11.9
76	11.6	11.6	11.6	11.5	11.5	11.5	11.4	11.4	11.3	11.3
77	11.0	11.0	11.0	10.9	10.9	10.9	10.8	10.8	10.8	10.7
78	10.4	10.4	10.4	10.4	10.3	10.3	10.3	10.2	10.2	10.2
79	9.9	9.8	9.8	9.8	9.8	9.8	9.7	9.7	9.7	9.6
80	9.3	9.3	9.3	9.3	9.2	9.2	9.2	9.2	9.1	9.1
81	8.8	8.8	8.7	8.7	8.7	8.7	8.7	8.7	8.6	8.6
82	8.3	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.1	8.1
83	7.8	7.8	7.7	7.7	7.7	7.7	7.7	7.7	7.7	7.6
84	7.3	7.3	7.3	7.3	7.3	7.2	7.2	7.2	7.2	7.2
85	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.7
86	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.3	6.3
87	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	5.9
88	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6
89	5.3	5.3	5.3	5.3	5.3	5.3	5.2	5.2	5.2	5.2
90	5.0	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9
91	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6
92	4.4	4.4	4.4	4.3	4.3	4.3	4.3	4.3	4.3	4.3
93	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1
94	3.9	3.9	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8
95	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6
96	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4
97	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2
98	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
99	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8
100	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6
101	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
102	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3

Table VIA.—Annuities for Joint Life Only Two Lives—Expected Return Multiples										
AGES	45	46	47	48	49	50	51	52	53	54
103	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1
104	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
105	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
106	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
107	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
108	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
109	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
110	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
111	.9	.9	.9	.9	.9	.9	.9	.9	.9	.9
112	.8	.8	.8	.8	.8	.8	.8	.8	.8	.8
113	.7	.7	.7	.7	.7	.7	.7	.7	.7	.7
114	.6	.6	.6	.6	.6	.6	.6	.6	.6	.6
115	.5	.5	.5	.5	.5	.5	.5	.5	.5	.5



Table VIA.—Annuities for Joint Life Only Two Lives—Expected Return Multiples										
AGES	55	56	57	58	59	60	61	62	63	64
55	22.7	22.3	21.9	21.4	20.9	20.4	19.9	19.4	18.8	18.3
56	22.3	21.9	21.5	21.1	20.6	20.1	19.6	19.1	18.6	18.0
57	21.9	21.5	21.1	20.7	20.3	19.8	19.3	18.8	18.3	17.8
58	21.4	21.1	20.7	20.3	19.9	19.5	19.0	18.5	18.0	17.5
59	20.9	20.6	20.3	19.9	19.5	19.1	18.7	18.2	17.7	17.3
60	20.4	20.1	19.8	19.5	19.1	18.7	18.3	17.9	17.4	17.0
61	19.9	19.6	19.3	19.0	18.7	18.3	17.9	17.5	17.1	16.7
62	19.4	19.1	18.8	18.5	18.2	17.9	17.5	17.1	16.8	16.3
63	18.8	18.6	18.3	18.0	17.7	17.4	17.1	16.8	16.4	16.0
64	18.3	18.0	17.8	17.5	17.3	17.0	16.7	16.3	16.0	15.6
65	17.7	17.5	17.3	17.0	16.8	16.5	16.2	15.9	15.6	15.3
66	17.1	16.9	16.7	16.5	16.3	16.0	15.8	15.5	15.2	14.9
67	16.5	16.3	16.2	16.0	15.8	15.5	15.3	15.0	14.7	14.5
68	15.9	15.8	15.6	15.4	15.2	15.0	14.8	14.6	14.3	14.0
69	15.3	15.2	15.0	14.9	14.7	14.5	14.3	14.1	13.9	13.6
70	14.7	14.6	14.5	14.3	14.2	14.0	13.8	13.6	13.4	13.2
71	14.1	14.0	13.9	13.8	13.6	13.5	13.3	13.1	12.9	12.7
72	13.5	13.4	13.3	13.2	13.1	12.9	12.8	12.6	12.4	12.3
73	13.0	12.9	12.8	12.7	12.5	12.4	12.3	12.1	12.0	11.8
74	12.4	12.3	12.2	12.1	12.0	11.9	11.8	11.6	11.5	11.3
75	11.8	11.7	11.7	11.6	11.5	11.4	11.3	11.1	11.0	10.9
76	11.2	11.2	11.1	11.0	10.9	10.9	10.8	10.6	10.5	10.4
77	10.7	10.6	10.6	10.5	10.4	10.3	10.3	10.2	10.0	9.9
78	10.1	10.1	10.0	10.0	9.9	9.8	9.8	9.7	9.6	9.5
79	9.6	9.6	9.5	9.5	9.4	9.3	9.3	9.2	9.1	9.0
80	9.1	9.0	9.0	9.0	8.9	8.9	8.8	8.7	8.7	8.6
81	8.6	8.5	8.5	8.5	8.4	8.4	8.3	8.3	8.2	8.1
82	8.1	8.1	8.0	8.0	8.0	7.9	7.9	7.8	7.8	7.7
83	7.6	7.6	7.6	7.5	7.5	7.5	7.4	7.4	7.3	7.3
84	7.2	7.1	7.1	7.1	7.1	7.0	7.0	7.0	6.9	6.9
85	6.7	6.7	6.7	6.7	6.6	6.6	6.6	6.5	6.5	6.5
86	6.3	6.3	6.3	6.3	6.2	6.2	6.2	6.2	6.1	6.1
87	5.9	5.9	5.9	5.9	5.9	5.8	5.8	5.8	5.8	5.7
88	5.6	5.5	5.5	5.5	5.5	5.5	5.5	5.4	5.4	5.4
89	5.2	5.2	5.2	5.2	5.2	5.1	5.1	5.1	5.1	5.1
90	4.9	4.9	4.9	4.9	4.9	4.8	4.8	4.8	4.8	4.8
91	4.6	4.6	4.6	4.6	4.6	4.5	4.5	4.5	4.5	4.5
92	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.2	4.2	4.2
93	4.1	4.1	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
94	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.7
95	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.5	3.5
96	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.3	3.3	3.3
97	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.1	3.1
98	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
99	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8
100	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6
101	2.5	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4
102	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.2
103	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1
104	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
105	1.8	1.8	1.8	1.8	1.8	1.8	1.7	1.7	1.7	1.7
106	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
107	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
108	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
109	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
110	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
111	.9	.9	.9	.9	.9	.9	.9	.9	.9	.9
112	.8	.8	.8	.8	.8	.8	.8	.8	.8	.8

Table VIA.—Annuities for Joint Life Only Two Lives—Expected Return Multiples										
AGES	55	56	57	58	59	60	61	62	63	64
113	.7	.7	.7	.7	.7	.7	.7	.7	.7	.7
114	.6	.6	.6	.6	.6	.6	.6	.6	.6	.6
115	.5	.5	.5	.5	.5	.5	.5	.5	.5	.5



Table VIA.—Annuities for Joint Life Only Two Lives—Expected Return Multiples										
AGES	65	66	67	68	69	70	71	72	73	74
65	14.9	14.5	14.1	13.7	13.3	12.9	12.5	12.0	11.6	11.2
66	14.5	14.2	13.8	13.4	13.1	12.6	12.2	11.8	11.4	11.0
67	14.1	13.8	13.5	13.1	12.8	12.4	12.0	11.6	11.2	10.8
68	13.7	13.4	13.1	12.8	12.5	12.1	11.7	11.4	11.0	10.6
69	13.3	13.1	12.8	12.5	12.1	11.8	11.4	11.1	10.7	10.4
70	12.9	12.6	12.4	12.1	11.8	11.5	11.2	10.8	10.5	10.1
71	12.5	12.2	12.0	11.7	11.4	11.2	10.9	10.5	10.2	9.9
72	12.0	11.8	11.6	11.4	11.1	10.8	10.5	10.2	9.9	9.6
73	11.6	11.4	11.2	11.0	10.7	10.5	10.2	9.9	9.7	9.4
74	11.2	11.0	10.8	10.6	10.4	10.1	9.9	9.6	9.4	9.1
75	10.7	10.5	10.4	10.2	10.0	9.8	9.5	9.3	9.1	8.8
76	10.3	10.1	9.9	9.8	9.6	9.4	9.2	9.0	8.8	8.5
77	9.8	9.7	9.5	9.4	9.2	9.0	8.8	8.6	8.4	8.2
78	9.4	9.2	9.1	9.0	8.8	8.7	8.5	8.3	8.1	7.9
79	8.9	8.8	8.7	8.6	8.4	8.3	8.1	8.0	7.8	7.6
80	8.5	8.4	8.3	8.2	8.0	7.9	7.8	7.6	7.5	7.3
81	8.0	8.0	7.9	7.8	7.7	7.5	7.4	7.3	7.1	7.0
82	7.6	7.5	7.5	7.4	7.3	7.2	7.1	6.9	6.8	6.7
83	7.2	7.1	7.1	7.0	6.9	6.8	6.7	6.6	6.5	6.4
84	6.8	6.7	6.7	6.6	6.5	6.4	6.4	6.3	6.2	6.0
85	6.4	6.4	6.3	6.2	6.2	6.1	6.0	5.9	5.8	5.7
86	6.0	6.0	5.9	5.9	5.8	5.8	5.7	5.6	5.5	5.4
87	5.7	5.6	5.6	5.6	5.5	5.4	5.4	5.3	5.2	5.2
88	5.3	5.3	5.3	5.2	5.2	5.1	5.1	5.0	5.0	4.9
89	5.0	5.0	5.0	4.9	4.9	4.8	4.8	4.7	4.7	4.6
90	4.7	4.7	4.7	4.6	4.6	4.6	4.5	4.5	4.4	4.4
91	4.5	4.4	4.4	4.4	4.3	4.3	4.3	4.2	4.2	4.1
92	4.2	4.2	4.1	4.1	4.1	4.1	4.0	4.0	3.9	3.9
93	3.9	3.9	3.9	3.9	3.9	3.8	3.8	3.8	3.7	3.7
94	3.7	3.7	3.7	3.7	3.6	3.6	3.6	3.6	3.5	3.5
95	3.5	3.5	3.5	3.5	3.4	3.4	3.4	3.4	3.3	3.3
96	3.3	3.3	3.3	3.3	3.3	3.2	3.2	3.2	3.2	3.1
97	3.1	3.1	3.1	3.1	3.1	3.1	3.0	3.0	3.0	3.0
98	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.8	2.8
99	2.8	2.8	2.8	2.7	2.7	2.7	2.7	2.7	2.7	2.6
100	2.6	2.6	2.6	2.6	2.6	2.5	2.5	2.5	2.5	2.5
101	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.3	2.3
102	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2
103	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0
104	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
105	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
106	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.5	1.5
107	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
108	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
109	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
110	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
111	.9	.9	.9	.9	.9	.9	.9	.9	.9	.9
112	.8	.8	.8	.8	.8	.8	.8	.8	.8	.8
113	.7	.7	.7	.7	.7	.6	.6	.6	.6	.6
114	.6	.6	.6	.6	.6	.6	.5	.5	.5	.5
115	.5	.5	.5	.5	.5	.5	.5	.5	.5	.5

Table VIA. — Annuities for Joint Life Only Two Lives — Expected Return Multiples										
AGES	75	76	77	78	79	80	81	82	83	84
75	8.6	8.3	8.0	7.7	7.4	7.1	6.8	6.5	6.2	5.9
76	8.3	8.0	7.8	7.5	7.2	6.9	6.7	6.4	6.1	5.8
77	8.0	7.8	7.5	7.3	7.0	6.8	6.5	6.2	5.9	5.7
78	7.7	7.5	7.3	7.0	6.8	6.6	6.3	6.0	5.8	5.5
79	7.4	7.2	7.0	6.8	6.6	6.3	6.1	5.9	5.6	5.4
80	7.1	6.9	6.8	6.6	6.3	6.1	5.9	5.7	5.5	5.2
81	6.8	6.7	6.5	6.3	6.1	5.9	5.7	5.5	5.3	5.1
82	6.5	6.4	6.2	6.0	5.9	5.7	5.5	5.3	5.1	4.9
83	6.2	6.1	5.9	5.8	5.6	5.5	5.3	5.1	4.9	4.7
84	5.9	5.8	5.7	5.5	5.4	5.2	5.1	4.9	4.7	4.6
85	5.6	5.5	5.4	5.3	5.2	5.0	4.9	4.7	4.6	4.4
86	5.4	5.3	5.1	5.0	4.9	4.8	4.7	4.5	4.4	4.2
87	5.1	5.0	4.9	4.8	4.7	4.6	4.4	4.3	4.2	4.1
88	4.8	4.7	4.6	4.5	4.4	4.3	4.2	4.1	4.0	3.9
89	4.5	4.5	4.4	4.3	4.2	4.1	4.0	3.9	3.8	3.7
90	4.3	4.2	4.2	4.1	4.0	3.9	3.8	3.8	3.7	3.5
91	4.1	4.0	4.0	3.9	3.8	3.7	3.7	3.6	3.5	3.4
92	3.9	3.8	3.7	3.7	3.6	3.6	3.5	3.4	3.3	3.2
93	3.7	3.6	3.6	3.5	3.4	3.4	3.3	3.2	3.2	3.1
94	3.5	3.4	3.4	3.3	3.3	3.2	3.2	3.1	3.0	3.0
95	3.3	3.2	3.2	3.2	3.1	3.1	3.0	3.0	2.9	2.8
96	3.1	3.1	3.0	3.0	3.0	2.9	2.9	2.8	2.8	2.7
97	2.9	2.9	2.9	2.9	2.8	2.8	2.7	2.7	2.6	2.6
98	2.8	2.8	2.7	2.7	2.7	2.6	2.6	2.6	2.5	2.5
99	2.6	2.6	2.6	2.6	2.5	2.5	2.5	2.4	2.4	2.3
100	2.5	2.5	2.4	2.4	2.4	2.4	2.3	2.3	2.3	2.2
101	2.3	2.3	2.3	2.3	2.2	2.2	2.2	2.2	2.1	2.1
102	2.2	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.0
103	2.0	2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.8
104	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.7	1.7	1.7
105	1.7	1.7	1.7	1.7	1.6	1.6	1.6	1.6	1.6	1.6
106	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.4
107	1.4	1.4	1.4	1.4	1.4	1.4	1.3	1.3	1.3	1.3
108	1.3	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
109	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
110	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
111	.9	.9	.9	.9	.9	.9	.9	.9	.8	.8
112	.8	.8	.8	.7	.7	.7	.7	.7	.7	.7
113	.6	.6	.6	.6	.6	.6	.6	.6	.6	.6
114	.5	.5	.5	.5	.5	.5	.5	.5	.5	.5
115	.5	.5	.5	.5	.5	.5	.5	.5	.5	.5



Table VIA.—Annuities for Joint Life Only Two Lives—Expected Return Multiples										
AGES	85	86	87	88	89	90	91	92	93	94
85	4.2	4.1	3.9	3.8	3.6	3.4	3.3	3.2	3.0	2.9
86	4.1	3.9	3.8	3.6	3.5	3.3	3.2	3.1	2.9	2.8
87	3.9	3.8	3.6	3.5	3.4	3.2	3.1	3.0	2.8	2.7
88	3.8	3.6	3.5	3.4	3.2	3.1	3.0	2.9	2.8	2.6
89	3.6	3.5	3.4	3.2	3.1	3.0	2.9	2.8	2.7	2.6
90	3.4	3.3	3.2	3.1	3.0	2.9	2.8	2.7	2.6	2.5
91	3.3	3.2	3.1	3.0	2.9	2.8	2.7	2.6	2.5	2.4
92	3.2	3.1	3.0	2.9	2.8	2.7	2.6	2.5	2.4	2.3
93	3.0	2.9	2.8	2.8	2.7	2.6	2.5	2.4	2.3	2.3
94	2.9	2.8	2.7	2.6	2.6	2.5	2.4	2.3	2.3	2.2
95	2.8	2.7	2.6	2.5	2.5	2.4	2.3	2.2	2.2	2.1
96	2.6	2.6	2.5	2.4	2.4	2.3	2.2	2.2	2.1	2.0
97	2.5	2.5	2.4	2.3	2.3	2.2	2.2	2.1	2.0	2.0
98	2.4	2.4	2.3	2.2	2.2	2.1	2.1	2.0	2.0	1.9
99	2.3	2.2	2.2	2.1	2.1	2.0	2.0	1.9	1.9	1.8
100	2.2	2.1	2.1	2.0	2.0	1.9	1.9	1.9	1.8	1.8
101	2.1	2.0	2.0	1.9	1.9	1.9	1.8	1.8	1.7	1.7
102	1.9	1.9	1.9	1.8	1.8	1.8	1.7	1.7	1.6	1.6
103	1.8	1.8	1.8	1.7	1.7	1.7	1.6	1.6	1.5	1.5
104	1.7	1.7	1.6	1.6	1.6	1.5	1.5	1.5	1.5	1.4
105	1.6	1.5	1.5	1.5	1.5	1.4	1.4	1.4	1.4	1.3
106	1.4	1.4	1.4	1.4	1.4	1.3	1.3	1.3	1.3	1.2
107	1.3	1.3	1.3	1.3	1.2	1.2	1.2	1.2	1.2	1.2
108	1.2	1.2	1.2	1.1	1.1	1.1	1.1	1.1	1.1	1.1
109	1.1	1.1	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
110	.9	.9	.9	.9	.9	.9	.9	.9	.9	.9
111	.8	.8	.8	.8	.8	.8	.8	.8	.8	.8
112	.7	.7	.7	.7	.7	.7	.7	.7	.7	.7
113	.6	.6	.6	.6	.6	.6	.6	.6	.6	.6
114	.5	.5	.5	.5	.5	.5	.5	.5	.5	.5
115	.5	.5	.5	.5	.5	.5	.5	.5	.5	.5

Table VIA.—Annuities for Joint Life Only Two Lives—Expected Return Multiples										
AGES	95	96	97	98	99	100	101	102	103	104
95	2.0	2.0	1.9	1.8	1.8	1.7	1.6	1.6	1.5	1.4
96	2.0	1.9	1.9	1.8	1.7	1.7	1.6	1.5	1.5	1.4
97	1.9	1.9	1.8	1.7	1.7	1.6	1.6	1.5	1.4	1.3
98	1.8	1.8	1.7	1.7	1.6	1.6	1.5	1.5	1.4	1.3
99	1.8	1.7	1.7	1.6	1.6	1.5	1.5	1.4	1.4	1.3
100	1.7	1.7	1.6	1.6	1.5	1.5	1.4	1.4	1.3	1.3
101	1.6	1.6	1.6	1.5	1.5	1.4	1.4	1.3	1.3	1.2
102	1.6	1.5	1.5	1.5	1.4	1.4	1.3	1.3	1.2	1.2
103	1.5	1.5	1.4	1.4	1.4	1.3	1.3	1.2	1.2	1.1
104	1.4	1.4	1.3	1.3	1.3	1.3	1.2	1.2	1.1	1.1
105	1.3	1.3	1.3	1.2	1.2	1.2	1.2	1.1	1.1	1.0
106	1.2	1.2	1.2	1.2	1.1	1.1	1.1	1.1	1.0	1.0
107	1.1	1.1	1.1	1.1	1.1	1.0	1.0	1.0	1.0	.9
108	1.0	1.0	1.0	1.0	1.0	1.0	1.0	.9	.9	.9
109	1.0	.9	.9	.9	.9	.9	.9	.9	.8	.8
110	.9	.9	.8	.8	.8	.8	.8	.8	.8	.8
111	.8	.8	.8	.8	.8	.7	.7	.7	.7	.7
112	.7	.7	.7	.7	.7	.7	.7	.7	.6	.6
113	.6	.6	.6	.6	.6	.6	.6	.6	.6	.6
114	.5	.5	.5	.5	.5	.5	.5	.5	.5	.5
115	.5	.5	.5	.5	.5	.5	.5	.5	.5	.5



Table VIA.—Annuities for Joint Life Only Two Lives—Expected Return Multiples											
AGES	105	106	107	108	109	100	111	112	113	114	115
105	1.0	1.0	.9	.9	.8	.7	.7	.6	.6	.5	.5
106	1.0	.9	.9	.8	.8	.7	.7	.6	.6	.5	.5
107	.9	.9	.8	.8	.7	.7	.7	.6	.6	.5	.5
108	.9	.8	.8	.8	.7	.7	.6	.6	.5	.5	.5
109	.8	.8	.7	.7	.7	.7	.6	.6	.5	.5	.5
110	.7	.7	.7	.7	.7	.6	.6	.6	.5	.5	.5
111	.7	.7	.7	.6	.6	.6	.6	.5	.5	.5	.5
112	.6	.6	.6	.6	.6	.6	.5	.5	.5	.5	.5
113	.6	.6	.6	.5	.5	.5	.5	.5	.5	.5	.5
114	.5	.5	.5	.5	.5	.5	.5	.5	.5	.5	.5
115	.5	.5	.5	.5	.5	.5	.5	.5	.5	.5	.5

Table VII.—Percent Value of Refund Feature Duration of Guaranteed Amount										
AGE	1 YEAR	2 YEARS	3 YEARS	4 YEARS	5 YEARS	6 YEARS	7 YEARS	8 YEARS	9 YEARS	10 YEARS
5	0	0	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	0	0	0
9	0	0	0	0	0	0	0	0	0	0
10	0	0	0	0	0	0	0	0	0	0
11	0	0	0	0	0	0	0	0	0	0
12	0	0	0	0	0	0	0	0	0	0
13	0	0	0	0	0	0	0	0	0	0
14	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0
16	0	0	0	0	0	0	0	0	0	0
17	0	0	0	0	0	0	0	0	0	0
18	0	0	0	0	0	0	0	0	0	0
19	0	0	0	0	0	0	0	0	0	0
20	0	0	0	0	0	0	0	0	0	0
21	0	0	0	0	0	0	0	0	0	0
22	0	0	0	0	0	0	0	0	0	0
23	0	0	0	0	0	0	0	0	0	0
24	0	0	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	0
26	0	0	0	0	0	0	0	0	0	0
27	0	0	0	0	0	0	0	0	0	0
28	0	0	0	0	0	0	0	0	0	0
29	0	0	0	0	0	0	0	0	0	0
30	0	0	0	0	0	0	0	0	0	0
31	0	0	0	0	0	0	0	0	0	0
32	0	0	0	0	0	0	0	0	0	0
33	0	0	0	0	0	0	0	0	0	0
34	0	0	0	0	0	0	0	0	0	0
35	0	0	0	0	0	0	0	0	0	0
36	0	0	0	0	0	0	0	0	0	0
37	0	0	0	0	0	0	0	0	0	1
38	0	0	0	0	0	0	0	0	0	1
39	0	0	0	0	0	0	0	0	1	1
40	0	0	0	0	0	0	0	1	1	1
41	0	0	0	0	0	0	0	1	1	1
42	0	0	0	0	0	0	1	1	1	1
43	0	0	0	0	0	0	1	1	1	1
44	0	0	0	0	0	1	1	1	1	1
45	0	0	0	0	0	1	1	1	1	1
46	0	0	0	0	1	1	1	1	1	1
47	0	0	0	0	1	1	1	1	1	1
48	0	0	0	0	1	1	1	1	1	1
49	0	0	0	1	1	1	1	1	1	2
50	0	0	0	1	1	1	1	1	1	2
51	0	0	0	1	1	1	1	1	2	2
52	0	0	0	1	1	1	1	1	2	2
53	0	0	1	1	1	1	1	2	2	2
54	0	0	1	1	1	1	1	2	2	2
55	0	0	1	1	1	1	2	2	2	2
56	0	0	1	1	1	1	2	2	2	3
57	0	0	1	1	1	2	2	2	3	3
58	0	1	1	1	1	2	2	2	3	3
59	0	1	1	1	1	2	2	3	3	4
60	0	1	1	1	2	2	2	3	3	4



Table VII.—Percent Value of Refund Feature Duration of Guaranteed Amount										
AGE	1 YEAR	2 YEARS	3 YEARS	4 YEARS	5 YEARS	6 YEARS	7 YEARS	8 YEARS	9 YEARS	10 YEARS
61	0	1	1	1	2	2	3	3	4	4
62	0	1	1	2	2	2	3	4	4	5
63	0	1	1	2	2	3	3	4	5	5
64	0	1	1	2	2	3	4	4	5	6
65	0	1	2	2	3	3	4	5	6	6
66	1	1	2	2	3	4	5	5	6	7
67	1	1	2	3	3	4	5	6	7	8
68	1	1	2	3	4	5	6	7	8	9
69	1	1	2	3	4	5	6	7	8	10
70	1	2	3	4	5	6	7	8	9	11
71	1	2	3	4	5	6	8	9	10	12
72	1	2	3	4	6	7	8	10	11	13
73	1	2	4	5	6	8	9	11	13	14
74	1	3	4	5	7	9	10	12	14	16
75	1	3	4	6	8	9	11	13	15	17
76	2	3	5	7	9	10	12	15	17	19
77	2	4	5	7	9	12	14	16	18	21
78	2	4	6	8	10	13	15	18	20	23
79	2	4	7	9	11	14	17	19	22	25
80	2	5	7	10	13	15	18	21	24	27
81	3	5	8	11	14	17	20	23	26	29
82	3	6	9	12	15	19	22	25	28	32
83	3	7	10	13	17	20	24	27	31	34
84	4	7	11	15	19	22	26	30	33	37
85	4	8	12	16	20	24	28	32	36	40
86	4	9	13	18	22	27	31	35	39	42
87	5	10	15	20	24	29	33	37	41	45
88	5	11	16	21	26	31	36	40	44	48
89	6	12	18	23	28	33	38	43	47	50
90	7	13	19	25	31	36	41	45	49	53
91	7	14	21	27	33	38	43	48	52	55
92	8	15	22	29	35	40	45	50	54	58
93	9	17	24	31	37	43	48	52	56	60
94	9	18	26	33	39	45	50	54	58	62
95	10	19	27	35	41	47	52	57	60	64
96	11	20	29	36	43	49	54	59	62	66
97	11	21	30	38	45	51	56	61	64	68
98	12	23	32	40	47	53	58	63	66	69
99	13	24	34	42	49	55	60	65	68	71
100	14	26	36	44	52	58	63	67	70	73
101	14	27	38	47	54	60	65	69	72	75
102	15	29	40	49	56	62	67	71	74	77
103	17	31	42	52	59	65	69	73	76	78
104	18	33	45	55	62	67	72	75	78	80
105	19	36	48	58	65	70	74	77	80	82
106	21	38	51	61	68	73	77	79	82	84
107	23	42	55	64	71	75	79	81	84	85
108	25	45	58	67	73	78	81	83	85	87
109	28	49	62	71	76	80	83	85	87	88
110	31	52	66	74	79	82	85	87	88	89
111	34	57	70	77	82	85	87	88	90	91
112	37	61	73	80	84	87	88	90	91	92
113	41	66	77	83	86	88	90	91	92	93
114	45	70	80	85	88	90	92	93	93	94
115	50	75	83	88	90	92	93	94	94	95

Table VII.—Percent Value of Refund Feature Duration of Guaranteed Amount										
AGE	11 YEARS	12 YEARS	13 YEARS	14 YEARS	15 YEARS	16 YEARS	17 YEARS	18 YEARS	19 YEARS	20 YEARS
5	0	0	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	0	0	0
9	0	0	0	0	0	0	0	0	0	0
10	0	0	0	0	0	0	0	0	0	0
11	0	0	0	0	0	0	0	0	0	0
12	0	0	0	0	0	0	0	0	0	0
13	0	0	0	0	0	0	0	0	0	0
14	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0
16	0	0	0	0	0	0	0	0	0	0
17	0	0	0	0	0	0	0	0	0	0
18	0	0	0	0	0	0	0	0	0	0
19	0	0	0	0	0	0	0	0	0	0
20	0	0	0	0	0	0	0	0	0	1
21	0	0	0	0	0	0	0	0	0	1
22	0	0	0	0	0	0	0	0	1	1
23	0	0	0	0	0	0	0	1	1	1
24	0	0	0	0	0	0	0	1	1	1
25	0	0	0	0	0	0	1	1	1	1
26	0	0	0	0	0	0	1	1	1	1
27	0	0	0	0	0	1	1	1	1	1
28	0	0	0	0	1	1	1	1	1	1
29	0	0	0	0	1	1	1	1	1	1
30	0	0	0	1	1	1	1	1	1	1
31	0	0	0	1	1	1	1	1	1	1
32	0	0	1	1	1	1	1	1	1	1
33	0	0	1	1	1	1	1	1	1	1
34	0	1	1	1	1	1	1	1	1	1
35	0	1	1	1	1	1	1	1	1	1
36	1	1	1	1	1	1	1	1	1	1
37	1	1	1	1	1	1	1	1	1	1
38	1	1	1	1	1	1	1	1	1	2
39	1	1	1	1	1	1	1	1	2	2
40	1	1	1	1	1	1	1	2	2	2
41	1	1	1	1	1	1	2	2	2	2
42	1	1	1	1	1	2	2	2	2	2
43	1	1	1	1	2	2	2	2	2	3
44	1	1	1	2	2	2	2	2	3	3
45	1	1	2	2	2	2	2	3	3	3
46	1	2	2	2	2	2	3	3	3	3
47	1	2	2	2	2	2	3	3	3	4
48	2	2	2	2	2	3	3	3	4	4
49	2	2	2	2	3	3	3	4	4	4
50	2	2	2	3	3	3	3	4	4	5
51	2	2	3	3	3	3	4	4	5	5
52	2	2	3	3	3	4	4	5	5	5
53	2	3	3	3	4	4	5	5	5	6
54	3	3	3	4	4	4	5	5	6	7
55	3	3	4	4	4	5	5	6	7	7
56	3	3	4	4	5	5	6	7	7	8
57	3	4	4	5	5	6	6	7	8	9
58	4	4	5	5	6	6	7	8	9	9
59	4	5	5	6	6	7	8	9	9	10
60	4	5	6	6	7	8	9	10	10	11



Table VII.—Percent Value of Refund Feature Duration of Guaranteed Amount										
AGE	11 YEARS	12 YEARS	13 YEARS	14 YEARS	15 YEARS	16 YEARS	17 YEARS	18 YEARS	19 YEARS	20 YEARS
61	5	6	6	7	8	9	10	10	11	13
62	5	6	7	8	9	10	11	12	13	14
63	6	7	8	9	10	11	12	13	14	15
64	7	8	8	9	10	12	13	14	15	17
65	7	8	9	10	12	13	14	15	17	18
66	8	9	10	12	13	14	15	17	18	20
67	9	10	11	13	14	15	17	18	20	22
68	10	11	13	14	15	17	19	20	22	24
69	11	12	14	15	17	19	20	22	24	26
70	12	14	15	17	19	20	22	24	26	28
71	13	15	17	18	20	22	24	26	28	30
72	15	17	18	20	22	24	26	28	30	32
73	16	18	20	22	24	26	28	31	33	35
74	18	20	22	24	26	28	31	33	35	37
75	19	22	24	26	28	31	33	35	38	40
76	21	24	26	28	31	33	36	38	40	43
77	23	26	28	31	33	36	38	41	43	45
78	25	28	31	33	36	38	41	43	46	48
79	28	30	33	36	38	41	44	46	48	51
80	30	33	36	38	41	44	46	49	51	53
81	32	35	38	41	44	47	49	51	54	56
82	35	38	41	44	47	49	52	54	56	58
83	38	41	44	47	49	52	54	57	59	61
84	40	44	47	49	52	55	57	59	61	63
85	43	46	49	52	55	57	59	62	63	65
86	46	49	52	55	57	60	62	64	66	67
87	48	52	55	57	60	62	64	66	68	69
88	51	54	57	60	62	64	66	68	70	71
89	54	57	60	62	65	67	68	70	72	73
90	56	59	62	64	67	69	70	72	74	75
91	59	62	64	67	69	71	72	74	75	76
92	61	64	66	69	71	72	74	75	77	78
93	63	66	68	70	72	74	75	77	78	79
94	65	68	70	72	74	75	77	78	79	80
95	67	69	72	74	75	77	78	79	81	82
96	69	71	73	75	77	78	80	81	82	83
97	70	73	75	77	78	80	81	82	83	84
98	72	74	76	78	79	81	82	83	84	85
99	74	76	78	79	81	82	83	84	85	86
100	75	78	79	81	82	83	84	85	86	86
101	77	79	81	82	83	84	85	86	87	87
102	79	81	82	83	84	85	86	87	88	88
103	80	82	83	85	86	87	87	88	89	89
104	82	84	85	86	87	88	88	89	90	90
105	84	85	86	87	88	89	89	90	90	91
106	85	86	87	88	89	90	90	91	91	92
107	87	88	89	89	90	91	91	92	92	93
108	88	89	90	90	91	92	92	93	93	93
109	89	90	91	92	92	93	93	93	94	94
110	90	91	92	92	93	93	94	94	94	95
111	92	92	93	93	94	94	95	95	95	95
112	93	93	94	94	95	95	95	96	96	96
113	94	94	95	95	95	96	96	96	96	97
114	95	95	95	96	96	96	97	97	97	97
115	95	96	96	96	97	97	97	97	97	98

Table VII.—Percent Value of Refund Feature Duration of Guaranteed Amount										
AGE	21 YEARS	22 YEARS	23 YEARS	24 YEARS	25 YEARS	26 YEARS	27 YEARS	28 YEARS	29 YEARS	30 YEARS
5	0	0	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	0	0	1
9	0	0	0	0	0	0	0	0	1	1
10	0	0	0	0	0	0	0	1	1	1
11	0	0	0	0	0	0	1	1	1	1
12	0	0	0	0	0	0	1	1	1	1
13	0	0	0	0	0	1	1	1	1	1
14	0	0	0	0	1	1	1	1	1	1
15	0	0	0	1	1	1	1	1	1	1
16	0	0	1	1	1	1	1	1	1	1
17	0	0	1	1	1	1	1	1	1	1
18	0	1	1	1	1	1	1	1	1	1
19	1	1	1	1	1	1	1	1	1	1
20	1	1	1	1	1	1	1	1	1	1
21	1	1	1	1	1	1	1	1	1	1
22	1	1	1	1	1	1	1	1	1	1
23	1	1	1	1	1	1	1	1	1	1
24	1	1	1	1	1	1	1	1	1	1
25	1	1	1	1	1	1	1	1	1	1
26	1	1	1	1	1	1	1	1	1	1
27	1	1	1	1	1	1	1	1	1	2
28	1	1	1	1	1	1	1	1	2	2
29	1	1	1	1	1	1	1	2	2	2
30	1	1	1	1	1	1	2	2	2	2
31	1	1	1	1	1	2	2	2	2	2
32	1	1	1	1	2	2	2	2	2	2
33	1	1	1	2	2	2	2	2	2	2
34	1	1	2	2	2	2	2	2	2	3
35	1	2	2	2	2	2	2	2	3	3
36	2	2	2	2	2	2	2	3	3	3
37	2	2	2	2	2	2	3	3	3	3
38	2	2	2	2	2	3	3	3	3	4
39	2	2	2	2	3	3	3	3	4	4
40	2	2	3	3	3	3	3	4	4	4
41	2	3	3	3	3	3	4	4	4	5
42	3	3	3	3	3	4	4	4	5	5
43	3	3	3	4	4	4	4	5	5	6
44	3	3	4	4	4	4	5	5	6	6
45	3	4	4	4	5	5	5	6	6	7
46	4	4	4	5	5	5	6	6	7	7
47	4	4	5	5	5	6	6	7	7	8
48	4	5	5	5	6	6	7	7	8	9
49	5	5	5	6	6	7	8	8	9	10
50	5	5	6	6	7	8	8	9	10	10
51	5	6	6	7	8	8	9	10	11	11
52	6	7	7	8	8	9	10	11	11	12
53	7	7	8	8	9	10	11	12	13	14
54	7	8	8	9	10	11	12	13	14	14
55	8	9	9	10	11	12	13	14	15	16
56	9	9	10	11	12	13	14	15	16	18
57	9	10	11	12	13	14	15	17	18	19
58	10	11	12	13	14	16	17	18	19	21
59	11	12	13	15	16	17	18	20	21	22
60	12	14	15	16	17	19	20	21	23	24