

**Supporting Information
For
Econ 330**

Exam 4

Fall 2007

Table 2. Estimated returns from finishing medium no. 1 yearling steers to choice slaughter grade.

<u>Month sold</u>	<u>1996</u>	<u>1997</u>	<u>1998</u>	<u>1999</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>Avg.</u>
January	\$9.49	\$42.98	\$-68.66	\$13.15	\$51.75	\$69.83	\$-71.61	\$122.95	\$90.02	\$-23.07	\$23.68
February	-12.85	49.08	-114.51	34.61	43.55	108.72	-31.31	118.45	18.73	-40.02	17.45
March	-27.55	90.87	-95.30	56.69	65.94	137.10	-13.81	111.60	41.20	53.18	41.99
April	-85.49	89.88	-49.70	43.60	77.51	92.24	-39.40	130.86	33.72	59.20	35.24
May	-98.26	65.14	-43.19	58.55	34.11	39.44	-33.51	116.02	35.17	73.98	24.74
June	-139.36	-37.59	-90.74	49.13	-28.52	21.81	-65.61	52.98	68.48	6.80	-4.61
July	-89.40	-58.39	-88.81	21.96	-53.62	26.23	-65.56	104.52	121.21	-32.97	1.59
August	17.21	16.89	-48.54	28.35	-53.85	3.87	-61.99	177.31	113.80	-2.22	19.06
September	78.14	27.32	-76.26	49.61	-48.32	-25.50	-48.01	294.72	61.13	13.50	32.63
October	123.01	19.53	-51.23	95.23	-37.51	-77.17	-36.30	440.48	44.85	6.51	52.74
November	130.29	-10.41	-32.00	115.91	19.37	-93.02	35.81	438.90	-16.73	29.84	61.80
December	<u>55.79</u>	<u>-24.92</u>	<u>-44.98</u>	<u>69.13</u>	<u>65.00</u>	<u>-122.48</u>	<u>51.98</u>	<u>261.30</u>	<u>-18.39</u>	<u>69.26</u>	<u>36.17</u>
Average	\$7.26	\$31.53	\$-65.65	\$52.99	\$11.28	\$15.09	\$-31.86	\$197.51	\$49.43	\$17.83	\$28.54

During the 1996-2005 period the range in profits was from \$-122.48 to \$440.48.	Months of			
	Month sold	Profit Loss		
During this period 61.7 percent of the months were profitable and 38.3 percent of the months were unprofitable.	January	70% 30%	Profit Over \$150	= 4.2% of months
	February	60% 40%	Profit \$120 - 150	= 5.0% of months
	March	70% 30%	Profit \$90 - 120	= 9.2% of months
	April	70% 30%	Profit \$60 - 90	= 10.8% of months
	May	70% 30%	Profit \$30 - 60	= 20.0% of months
	June	60% 40%	Profit \$0 - 30	= 12.5% of months
	July	40% 60%	Loss \$0 - -30	= 10.0% of months
	August	60% 40%	Loss \$-30 - -60	= 14.2% of months
	September	60% 40%	Loss \$-60 - -90	= 8.3% of months
	October	60% 40%	Loss \$-90 - -120	= 4.2% of months
	November	60% 40%	Loss \$-120 - -150	= 0.8% of months
	December	60% 40%	Loss Over \$-150	= 0.0% of months

Econ 330
Spring 2007
Percent Return on Investment by Type of Iowa Farm
(1970-2005)

Year	Hog	Beef Feeding	Dairy	Grain	Beef Raising
1970	4.4	4.2	6.1	5.6	NA
1971	6.4	9.3	6.6	5.4	NA
1972	13.4	9.7	8.6	9.6	NA
1973	23.8	13.4	14.8	16.2	NA
1974	13.3	2.9	8.3	14.2	NA
1975	10.1	7.3	2.5	6.1	3.6
1976	10.2	4.3	8.5	10.8	2.7
1977	6.8	3.9	4.9	4.5	2.9
1978	10.4	10.8	8.3	7.0	8.0
1979	5.4	8.4	10.8	7.3	7.3
1980	7.9	6.2	8.5	8.6	3.8
1981	3.6	3.8	4.9	4.0	2.9
1982	6.9	3.1	2.0	2.9	1.9
1983	3.9	5.4	2.5	6.2	3.3
1984	5.5	5.4	3.8	2.3	(0.3)
1985	9.4	4.5	7.0	7.5	5.2
1986	15.0	8.3	NE	7.0	5.9
1987	18.0	11.0	13.0	8.0	15.0
1988	11.0	9.0	14.0	13.0	14.0
1989	10.0	6.0	NE	9.0	6.0
1990	17.0	13.0	15.0	6.0	5.0
1991	8.0	3.0	3.0	6.4	6.2
1992	7.0	10.0	11.0	4.0	7.0
1993	7.0	3.7	7.3	5.0	3.9
1994	3.4	4.7	6.7	8.2	4.5
1995	11.4	7.3	6.0	12.1	3.9
1996	11.4	8.6	6.4	10.2	4.3
1997	9.2	6.7	5.0	9.3	6.7
1998	(6.6)	(1.0)	8.3	1.3	(1.7)
1999	4.8	5.5	10.6	2.5	3.4
2000	11.4	7.1	5.6	7.9	5.2
2001	7.6	2.2	11.2	3.2	1.0
2002	4.0	5.8	4.6	6.4	5.5
2003	5.6	12.0	6.6	5.8	5.7
2004	12.5	8.2	11.8	7.9	5.8
2005	11.1	5.9	8	6.2	4.3
Average	8.9	6.5	7.7	7.2	4.9
High	23.8	13.4	15.0	16.2	15.0
Low	(6.6)	(2.0)	2.0	1.3	(1.7)
Standard Dev.	5.3	3.5	3.5	3.5	3.5

TABLE 4. ANNUAL DEPRECIATION PERCENTAGES FOR 3-YR PROPERTY, 150% DB

Tax Year	Mid-Year Convention	Mid-Quarter Convention			
		Quarter Placed in Service			
		1	2	3	4
1	25.000%	43.750%	31.250%	18.750%	6.250%
2	37.500	28.125	34.375	40.625	46.875
3	25.000	25.000	25.000	25.000	25.000
4	12.500	3.125	9.375	15.625	21.875
Total	100.000%	100.000%	100.000%	100.000%	100.000%

TABLE 5. ANNUAL DEPRECIATION PERCENTAGES FOR 5-YR PROPERTY, 150% DB

Tax Year	Mid-Year Convention	Mid-Quarter Convention			
		Quarter Placed in Service			
		1	2	3	4
1	15.000%	26.250%	18.750%	11.250%	3.750%
2	25.500	22.125	24.375	26.625	28.875
3	17.850	16.520	17.062	18.637	20.212
4-5	16.660	16.520	16.763	16.567	16.404
6	8.330	2.065	6.287	10.354	14.355
Total	100.000%	100.000%	100.000%	100.000%	100.000%

TABLE 6. ANNUAL DEPRECIATION PERCENTAGES FOR 6-YR PROPERTY, 150% DB

Tax Year	Mid-Year Convention	Mid-Quarter Convention			
		Quarter Placed in Service			
		1	2	3	4
1	12.500%	21.875%	15.625%	9.375%	3.125%
2	21.875	19.531	21.094	22.656	24.219
3	16.406	14.649	15.820	16.992	18.164
4-6	14.063	14.062	14.063	14.063	14.062
7	7.032	1.759	5.272	8.788	12.306
Total	100.000%	100.000%	100.000%	100.000%	100.000%

TABLE 7. ANNUAL DEPRECIATION PERCENTAGES FOR 7-YR PROPERTY, 150% DB

Tax Year	Mid-Year Convention	Mid-Quarter Convention			
		Quarter Placed in Service			
		1	2	3	4
1	10.714%	18.750%	13.393%	8.036%	2.679%
2	19.133	17.411	18.559	19.707	20.854
3	15.033	13.680	14.582	15.484	16.386
4	12.249	12.160	12.221	12.275	12.874
5-7	12.249	12.160	12.221	12.275	12.182
8	6.124	1.520	4.582	7.673	10.661
Total	100.000%	100.000%	100.000%	100.000%	100.000%

TABLE 8. ANNUAL DEPRECIATION PERCENTAGES, 10-YR PROPERTY, 150% DB

Tax Year	Mid-Year Convention	Mid-Quarter Convention			
		Quarter Placed in Service			
		1	2	3	4
1	7.500%	13.125%	9.375%	5.625%	1.875%
2	13.875	13.031	13.594	14.156	14.719
3	11.794	11.077	11.555	12.033	12.511
4	10.025	9.415	9.821	10.228	10.634
5	8.739	8.711	8.730	8.748	9.039
6-10	8.739	8.710	8.730	8.748	8.718
11	4.372	1.092	3.275	5.470	7.632
Total	100.000%	100.000%	100.000%	100.000%	100.000%

TABLE 9. ANNUAL DEPRECIATION PERCENTAGES, 12-YR PROPERTY, 150% DB

Tax Year	Mid-Year Convention	Mid-Quarter Convention			
		Quarter Placed in Service			
		1	2	3	4
1	6.250%	10.938%	7.813%	4.688%	1.563%
2	11.719	11.133	11.523	11.914	12.305
3	10.254	9.741	10.083	10.425	10.767
4	8.972	8.524	8.823	9.122	9.421
5	7.851	7.458	7.720	7.981	8.243
6-12	7.327	7.327	7.327	7.327	7.327
13	3.665	0.917	2.749	4.581	6.412
Total	100.000%	100.000%	100.000%	100.000%	100.000%

TABLE 10. ANNUAL DEPRECIATION PERCENTAGES, 15-YR PROPERTY, 150% DB

Tax Year	Mid-Year Convention	Mid-Quarter Convention			
		Quarter Placed in Service			
		1	2	3	4
1	5.000%	8.750%	6.250%	3.750%	1.250%
2	9.500	9.125	9.375	9.625	9.875
3	8.550	8.212	8.437	8.662	8.887
4	7.695	7.391	7.593	7.796	7.998
5	6.925	6.652	6.834	7.017	7.198
6	6.232	5.987	6.151	6.315	6.479
7-15	5.905	5.905	5.905	5.905	5.905
16	2.953	0.738	2.215	3.691	5.168
Total	100.000%	100.000%	100.000%	100.000%	100.000%

TABLE 11. ANNUAL DEPRECIATION PERCENTAGES, 20-YR PROPERTY, 150% DB

Tax Year	Mid-Year Convention	Mid-Quarter Convention			
		Quarter Placed in Service			
		1	2	3	4
1	3.750%	6.562%	4.687%	2.812%	0.937%
2	7.218	7.007	7.148	7.289	7.429
3	6.677	6.482	6.612	6.742	6.872
4	6.176	5.996	6.116	6.236	6.357
5	5/713	5.546	5.657	5.769	5.880
6	5.285	5.130	5.233	5.336	5.439
7	4.888	4.745	4.841	4.936	5.031
8	4.522	4.457	4.477	4.568	4.654
9-20	4.461	4.460	4.463	4.460	4.458
21	2.239	0.555	1.673	2.792	3.905
Total	100.000%	100.000%	100.000%	100.000%	100.000%

TABLE 12. ANNUAL FRACTIONS FOR STRAIGHT LINE OVER N YEARS (N < 20)

Tax Year	Mid-Year Convention	Mid-Quarter Convention			
		Quarter Placed in Service			
		1	2	3	4
1	1/2	7/8	5/8	3/8	1/8
2-N	1	1	1	1	1
N+1	1/2	1/8	3/8	5/8	7/8

DEPRECIATION FORMULA: Basis ÷ N times number from above table.

TABLE 13. ANNUAL FRACTIONS FOR 27½ YEAR PROPERTY, REGULAR MACRS

Tax Year	Month Placed in Service											
	1	2	3	4	5	6	7	8	9	10	11	12
1	11.5	10.5	9.5	8.5	7.5	6.5	5.5	4.5	3.5	2.5	1.5	0.5
2-27	12	12	12	12	12	12	12	12	12	12	12	12
28	6.5	7.5	8.5	9.5	10.5	11.5	12	12	12	12	12	12
29	-	-	-	-	-	-	0.5	1.5	2.5	3.5	4.5	5.5

DEPRECIATION FORMULA: Basis+27½+12 times number from above table.

TABLE 14. ANNUAL FRACTIONS FOR 31½ YEAR PROPERTY, REGULAR MACRS

Tax Year	Month Placed in Service											
	1	2	3	4	5	6	7	8	9	10	11	12
1	11.5	10.5	9.5	8.5	7.5	6.5	5.5	4.5	3.5	2.5	1.5	0.5
2-31	12	12	12	12	12	12	12	12	12	12	12	12
32	6.5	7.5	8.5	9.5	11.5	12	12	12	12	12	12	12
33	-	-	-	-	-	-	0.5	1.5	2.5	3.5	4.5	5.5

DEPRECIATION FORMULA: Basis+31½+12 times number from above table.

TABLE 15. ANNUAL FRACTIONS FOR ALTERNATIVE MACRS, 40 YEARS

Tax Year	Month Placed in Service											
	1	2	3	4	5	6	7	8	9	10	11	12
1	11.5	10.5	9.5	8.5	7.5	6.5	5.5	4.5	3.5	2.5	1.5	0.5
2-40	12	12	12	12	12	12	12	12	12	12	12	12
41	0.5	1.5	2.5	3.5	4.5	5.5	6.5	7.5	8.5	9.5	10.5	11.5

DEPRECIATION FORMULA: BASIS+40+12 times number from above table.

COOPERATIVE EXTENSION SERVICE
 U.S. DEPARTMENT OF AGRICULTURE
 UNIVERSITY OF MISSOURI
 CLARK HALL, COLUMBIA, MISSOURI 65211



BULK RATE
 POSTAGE & FEES PAID
 EXTENSION SERVICE
 PERMIT NO. G-258.

OFFICIAL BUSINESS
 PENALTY FOR PRIVATE USE, \$300

THIRD CLASS BULK R

Future value of a \$1 investment (Table 2)

Years	Interest Rate													
	4%	5%	6%	7%	8%	9%	10%	11%	12%	13%	14%	15%	16%	
1	1.0400	1.0500	1.0600	1.0700	1.0800	1.0900	1.1000	1.1100	1.1200	1.1300	1.1400	1.1500	1.1600	
2	1.0816	1.1025	1.1236	1.1449	1.1664	1.1881	1.2100	1.2321	1.2544	1.2769	1.2996	1.3225	1.3456	
3	1.1249	1.1576	1.1910	1.2250	1.2597	1.2950	1.3310	1.3676	1.4049	1.4429	1.4815	1.5209	1.5609	
4	1.1699	1.2155	1.2625	1.3108	1.3605	1.4116	1.4641	1.5181	1.5735	1.6305	1.6890	1.7490	1.8106	
5	1.2167	1.2763	1.3382	1.4026	1.4693	1.5386	1.6105	1.6851	1.7623	1.8424	1.9254	2.0114	2.1003	
6	1.2653	1.3401	1.4185	1.5007	1.5869	1.6771	1.7716	1.8704	1.9738	2.0820	2.1950	2.3131	2.4364	
7	1.3159	1.4071	1.5036	1.6058	1.7138	1.8280	1.9487	2.0762	2.2107	2.3526	2.5023	2.6600	2.8262	
8	1.3686	1.4775	1.5938	1.7182	1.8509	1.9926	2.1436	2.3045	2.4760	2.6584	2.8526	3.0590	3.2784	
9	1.4233	1.5513	1.6895	1.8385	1.9990	2.1719	2.3579	2.5580	2.7731	3.0040	3.2519	3.5179	3.8030	
10	1.4802	1.6289	1.7908	1.9672	2.1589	2.3674	2.5937	2.8394	3.1058	3.3946	3.7072	4.0456	4.4114	
11	1.5395	1.7103	1.8983	2.1049	2.3316	2.5804	2.8531	3.1518	3.4785	3.8359	4.2262	4.6524	5.1173	
12	1.6010	1.7959	2.0122	2.2522	2.5182	2.8127	3.1384	3.4985	3.8960	4.3345	4.8179	5.3503	5.9360	
13	1.6651	1.8856	2.1329	2.4098	2.7196	3.0658	3.4523	3.8833	4.3635	4.8980	5.4924	6.1528	6.8858	
14	1.7317	1.9799	2.2609	2.5785	2.9372	3.3417	3.7975	4.3104	4.8871	5.5348	6.2613	7.0757	7.9875	
15	1.8009	2.0789	2.3966	2.7590	3.1722	3.6425	4.1772	4.7846	5.4736	6.2543	7.1379	8.1371	9.2655	
16	1.8730	2.1829	2.5404	2.9522	3.4259	3.9703	4.5950	5.3109	6.1304	7.0673	8.1372	9.3576	10.7480	
17	1.9479	2.2920	2.6928	3.1588	3.7000	4.3276	5.0545	5.8951	6.8660	7.9861	9.2765	10.7613	12.4677	
18	2.0258	2.4066	2.8543	3.3799	3.9960	4.7171	5.5599	6.5436	7.6900	9.0243	10.5752	12.3755	14.4625	
19	2.1068	2.5270	3.0256	3.6165	4.3157	5.1417	6.1159	7.2633	8.6128	10.1974	12.0557	14.2318	16.7765	
20	2.1911	2.6533	3.2071	3.8697	4.6610	5.6044	6.7275	8.0623	9.6463	11.5231	13.7435	16.3665	19.4608	
21	2.2788	2.7860	3.3996	4.1406	5.0338	6.1088	7.4002	8.9492	10.8038	13.0211	15.6676	18.8215	22.5745	
22	2.3699	2.9253	3.6035	4.4304	5.4365	6.6586	8.1403	9.9336	12.1003	14.7138	17.8610	21.6447	26.1864	
23	2.4647	3.0715	3.8197	4.7405	5.8715	7.2579	8.9543	11.0263	13.5523	16.6266	20.3616	24.8915	30.3762	
24	2.5633	3.2251	4.0489	5.0724	6.3412	7.9111	9.8497	12.2392	15.1786	18.7881	23.2122	28.6252	35.2364	
25	2.6658	3.3864	4.2919	5.4274	6.8485	8.6231	10.8347	13.5855	17.0001	21.2305	26.4619	32.9190	40.8742	
30	3.2434	4.3219	5.7435	7.6123	10.0627	13.2677	17.4494	22.8923	29.9599	39.1159	50.9502	66.2118	85.8499	
35	3.9461	5.5160	7.6861	10.6766	14.7853	20.4140	28.1024	38.5749	52.7996	72.0685	98.1002	133.1755	180.3141	
40	4.8010	7.0400	10.2857	14.9745	21.7245	31.4094	45.2593	65.0009	93.0510	132.7816	188.8835	267.8635	378.7212	

Future value of a \$1 annuity (Table 3)

Years	Interest Rate													
	4%	5%	6%	7%	8%	9%	10%	11%	12%	13%	14%	15%	16%	
1	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	
2	2.0400	2.0500	2.0600	2.0700	2.0800	2.0900	2.1000	2.1100	2.1200	2.1300	2.1400	2.1500	2.1600	
3	3.1216	3.1525	3.1836	3.2149	3.2464	3.2781	3.3100	3.3421	3.3744	3.4069	3.4396	3.4725	3.5056	
4	4.2465	4.3101	4.3746	4.4399	4.5061	4.5731	4.6410	4.7097	4.7793	4.8498	4.9211	4.9934	5.0665	
5	5.4163	5.5256	5.6371	5.7507	5.8666	5.9847	6.1051	6.2278	6.3528	6.4803	6.6101	6.7424	6.8771	
6	6.6330	6.8019	6.9753	7.1533	7.3359	7.5233	7.7156	7.9129	8.1152	8.3227	8.5355	8.7537	8.9775	
7	7.8983	8.1420	8.3938	8.6540	8.9228	9.2004	9.4872	9.7833	10.0890	10.4047	10.7305	11.0668	11.4139	
8	9.2142	9.5491	9.8975	10.2598	10.6366	11.0285	11.4359	11.8594	12.2997	12.7573	13.2328	13.7268	14.2401	
9	10.5828	11.0266	11.4913	11.9780	12.4876	13.0210	13.5795	14.1640	14.7757	15.4157	16.0853	16.7858	17.5185	
10	12.0061	12.5779	13.1808	13.8164	14.4866	15.1929	15.9374	16.7220	17.5487	18.4197	19.3373	20.3037	21.3215	
11	13.4864	14.2068	14.9716	15.7836	16.6455	17.5603	18.5312	19.5614	20.6546	21.8143	23.0445	24.3493	25.7329	
12	15.0258	15.9171	16.8699	17.8885	18.9771	20.1407	21.3843	22.7132	24.1331	25.6502	27.2707	29.0017	30.8502	
13	16.6268	17.7130	18.8821	20.1406	21.4953	22.9534	24.5227	26.2116	28.0291	29.9847	32.0887	34.3519	36.7862	
14	18.2919	19.5986	21.0151	22.5505	24.2149	26.0192	27.9750	30.0949	32.3926	34.8827	37.5811	40.5047	43.6720	
15	20.0236	21.5786	23.2760	25.1290	27.1521	29.3609	31.7725	34.4054	37.2797	40.4175	43.8424	47.5804	51.6595	
16	21.8245	23.6575	25.6725	27.8881	30.3243	33.0034	35.9497	39.1899	42.7533	46.6717	50.9804	55.7175	60.9250	
17	23.6975	25.8404	28.2129	30.8402	33.7502	36.9737	40.5447	44.5008	48.8837	53.7391	59.1176	65.0751	71.6730	
18	25.6454	28.1324	30.9057	33.9990	37.4502	41.3013	45.5992	50.3959	55.7497	61.7251	68.3941	75.8364	84.1407	
19	27.6712	30.5390	33.7600	37.3790	41.4463	46.0185	51.1591	56.9395	63.4397	70.7494	78.9692	88.2118	98.6032	
20	29.7781	33.0660	36.7856	40.9955	45.7620	51.1601	57.2750	64.2028	72.0524	80.9468	91.0249	102.4436	115.3797	
21	31.9692	35.7193	39.9927	44.8652	50.4229	56.7645	64.0025	72.2651	81.6987	92.4699	104.7684	118.8101	134.8405	
22	34.2480	38.5052	43.3923	49.0057	55.4568	62.8733	71.4027	81.2143	92.5026	105.4910	120.4360	137.6316	157.4150	
23	36.6179	41.4305	46.9958	53.4361	60.8933	69.5319	79.5430	91.1479	104.6029	120.2048	138.2970	159.2764	183.6014	
24	39.0826	44.5020	50.8156	58.1767	66.7648	76.7898	88.4973	102.1742	118.1552	136.8315	158.6586	184.1678	213.9776	
25	41.6459	47.7271	54.8645	63.2490	73.1059	84.7009	98.3471	114.4133	133.3339	155.6196	181.8708	212.7930	249.2140	
30	56.0849	66.4388	79.0582	94.4608	113.2832	136.3075	164.4940	199.0209	241.3327	293.1992	356.7868	434.7451	530.3117	
35	73.6522	90.3203	111.4348	138.2369	172.3168	215.7108	271.0244	341.5896	431.6635	546.6808	693.5727	881.1702	1120.7130	
40	95.0255	120.7998	154.7620	199.6351	259.0565	337.8824	442.5926	581.8261	767.0914	1013.7042	1342.0251	1779.0903	2360.7572	

Present value of a \$1 lump sum (Table 4)

Interest Rate

Years 4% 5% 6% 7% 8% 9% 10% 11% 12% 13% 14% 15% 16%

1	0.96154	0.95238	0.94340	0.93458	0.92593	0.91743	0.90909	0.90090	0.89286	0.88496	0.87719	0.86957	0.8620
2	0.92456	0.90703	0.89000	0.87344	0.85734	0.84168	0.82645	0.81162	0.79719	0.78315	0.76947	0.75614	0.7431
3	0.88900	0.86384	0.83962	0.81630	0.79383	0.77218	0.75131	0.73119	0.71178	0.69305	0.67497	0.65752	0.6406
4	0.85480	0.82270	0.79209	0.76290	0.73503	0.70843	0.68301	0.65873	0.63552	0.61332	0.59208	0.57175	0.5522
5	0.82193	0.78353	0.74725	0.71299	0.68058	0.64993	0.62092	0.59345	0.56743	0.54276	0.51937	0.49718	0.4761
6	0.79031	0.74622	0.70496	0.66634	0.63017	0.59627	0.56447	0.53464	0.50663	0.48032	0.45559	0.43233	0.4104
7	0.75992	0.71068	0.66506	0.62275	0.58349	0.54703	0.51316	0.48166	0.45235	0.42506	0.39964	0.37594	0.3538
8	0.73069	0.67684	0.62741	0.58201	0.54027	0.50187	0.46651	0.43393	0.40388	0.37616	0.35056	0.32690	0.3050
9	0.70259	0.64461	0.59190	0.54393	0.50025	0.46043	0.42410	0.39092	0.36061	0.33288	0.30751	0.28426	0.2629
10	0.67556	0.61391	0.55839	0.50835	0.46319	0.42241	0.38554	0.35218	0.32197	0.29459	0.26974	0.24718	0.2266
11	0.64958	0.58468	0.52679	0.47509	0.42888	0.38753	0.35049	0.31728	0.28748	0.26070	0.23662	0.21494	0.1954
12	0.62460	0.55684	0.49697	0.44401	0.39711	0.35553	0.31863	0.28584	0.25668	0.23071	0.20756	0.18691	0.1684
13	0.60057	0.53032	0.46884	0.41496	0.36770	0.32618	0.28966	0.25751	0.22917	0.20416	0.18207	0.16253	0.1452
14	0.57748	0.50507	0.44230	0.38782	0.34046	0.29925	0.26333	0.23199	0.20462	0.18068	0.15971	0.14133	0.1252
15	0.55526	0.48102	0.41727	0.36245	0.31524	0.27454	0.23939	0.20900	0.18270	0.15989	0.14010	0.12289	0.1079
16	0.53391	0.45811	0.39365	0.33873	0.29189	0.25187	0.21763	0.18829	0.16312	0.14150	0.12289	0.10686	0.0930
17	0.51337	0.43630	0.37136	0.31657	0.27027	0.23107	0.19784	0.16963	0.14564	0.12522	0.10780	0.09293	0.0802
18	0.49363	0.41552	0.35034	0.29586	0.25025	0.21199	0.17986	0.15282	0.13004	0.11081	0.09456	0.08081	0.0691
19	0.47464	0.39573	0.33051	0.27651	0.23171	0.19449	0.16351	0.13768	0.11611	0.09806	0.08295	0.07027	0.0596
20	0.45639	0.37689	0.31180	0.25842	0.21455	0.17843	0.14864	0.12403	0.10367	0.08678	0.07276	0.06110	0.0513
21	0.43883	0.35894	0.29416	0.24151	0.19866	0.16370	0.13513	0.11174	0.09256	0.07680	0.06383	0.05313	0.0443
22	0.42196	0.34185	0.27751	0.22571	0.18394	0.15018	0.12285	0.10067	0.08264	0.06796	0.05589	0.04620	0.0381
23	0.40573	0.32557	0.26180	0.21095	0.17032	0.13778	0.11168	0.09069	0.07379	0.06014	0.04911	0.04017	0.0329
24	0.39012	0.31007	0.24698	0.19715	0.15770	0.12540	0.10153	0.08170	0.06588	0.05323	0.04308	0.03493	0.0283
25	0.37512	0.29530	0.23300	0.18425	0.14602	0.11597	0.09230	0.07361	0.05882	0.04710	0.03779	0.03038	0.0244
30	0.30832	0.23138	0.17411	0.13137	0.09938	0.07537	0.05731	0.04368	0.03338	0.02557	0.01963	0.01510	0.0115
35	0.25342	0.18129	0.13011	0.09366	0.06763	0.04899	0.03558	0.02592	0.01894	0.01388	0.01019	0.00751	0.0055
40	0.20829	0.14205	0.09722	0.06678	0.04603	0.03184	0.02209	0.01538	0.01075	0.00753	0.00529	0.00373	0.0026

Present value of a \$1 annuity (Table 5)

Interest Rate

Years 4% 5% 6% 7% 8% 9% 10% 11% 12% 13% 14% 15% 16%

1	0.9615	0.9524	0.9434	0.9346	0.9259	0.9174	0.9091	0.9009	0.8929	0.8850	0.8772	0.8696	0.862
2	1.8861	1.8594	1.8334	1.8080	1.7833	1.7591	1.7355	1.7125	1.6901	1.6681	1.6467	1.6257	1.605
3	2.7751	2.7232	2.6730	2.6243	2.5771	2.5313	2.4869	2.4437	2.4018	2.3612	2.3216	2.2832	2.245
4	3.6299	3.5460	3.4651	3.3872	3.3121	3.2397	3.1699	3.1024	3.0373	2.9745	2.9137	2.8550	2.796
5	4.4518	4.3295	4.2124	4.1002	3.9927	3.8897	3.7908	3.6959	3.6048	3.5172	3.4331	3.3522	3.274
6	5.2421	5.0757	4.9173	4.7665	4.6229	4.4859	4.3553	4.2305	4.1114	3.9975	3.8887	3.7845	3.684
7	6.0021	5.7864	5.5824	5.3893	5.2064	5.0330	4.8684	4.7122	4.5638	4.4226	4.2883	4.1604	4.038
8	6.7327	6.4632	6.2098	5.9713	5.7466	5.5348	5.3349	5.1461	4.9676	4.7988	4.6389	4.4873	4.344
9	7.4353	7.1078	6.8017	6.5152	6.2469	5.9952	5.7590	5.5370	5.3282	5.1317	4.9464	4.7718	4.604
10	8.1109	7.7217	7.3601	7.0236	6.7101	6.4177	6.1446	5.8892	5.6502	5.4262	5.2161	5.0188	4.833
11	8.7605	8.3064	7.8869	7.4987	7.1390	6.8052	6.4951	6.2065	5.9377	5.6869	5.4527	5.2337	5.028
12	9.3851	8.8633	8.3838	7.9427	7.5361	7.1607	6.8137	6.4924	6.1944	5.9176	5.6603	5.4206	5.191
13	9.9856	9.3936	8.8527	8.3577	7.9038	7.4869	7.1034	6.7499	6.4235	6.1218	5.8424	5.5831	5.341
14	10.5631	9.8986	9.2950	8.7455	8.2442	7.7862	7.3667	6.9819	6.6282	6.3025	6.0021	5.7245	5.461
15	11.1184	10.3797	9.7122	9.1079	8.5595	8.0607	7.6067	7.1909	6.8109	6.4624	6.1422	5.8474	5.571
16	11.6523	10.8378	10.1059	9.4466	8.8514	8.3126	7.8237	7.3792	6.9740	6.6039	6.2651	5.9542	5.661
17	12.1657	11.2741	10.4773	9.7632	9.1216	8.5436	8.0216	7.5488	7.1196	6.7291	6.3729	6.0472	5.744
18	12.6593	11.6896	10.8276	10.0591	9.3719	8.7556	8.2014	7.7016	7.2497	6.8399	6.4674	6.1280	5.811
19	13.1339	12.0853	11.1581	10.3356	9.6036	8.9501	8.3649	7.8393	7.3658	6.9380	6.5504	6.1982	5.871
20	13.5903	12.4622	11.4699	10.5940	9.8181	9.1285	8.5136	7.9633	7.4694	7.0248	6.6231	6.2593	5.921
21	14.0292	12.8212	11.7641	10.8355	10.0168	9.2922	8.6487	8.0751	7.5620	7.1016	6.6870	6.3125	5.971
22	14.4511	13.1630	12.0416	11.0612	10.2007	9.4424	8.7715	8.1757	7.6446	7.1695	6.7429	6.3587	6.011
23	14.8568	13.4886	12.3034	11.2722	10.3711	9.5802	8.8832	8.2664	7.7184	7.2297	6.7921	6.3988	6.041
24	15.2470	13.7986	12.5504	11.4693	10.5288	9.7066	8.9847	8.3481	7.7843	7.2829	6.8351	6.4338	6.071
25	15.6221	14.0939	12.7834	11.6536	10.6748	9.8226	9.0770	8.4217	7.8431	7.3300	6.8729	6.4641	6.091
30	17.2920	15.3725	13.7648	12.4090	11.2578	10.2737	9.4269	8.6938	8.0552	7.4957	7.0027	6.5660	6.171
35	18.6646	16.3742	14.4982	12.9477	11.6546	10.5668	9.6442	8.8552	8.1755	7.5856	7.0700	6.6186	6.211
40	19.7928	17.1591	15.0463	13.3317	11.9246	10.7574	9.7791	8.9511	8.2438	7.6344	7.1050	6.6418	6.231

TABLE 1. AMORTIZATION FACTORS FOR EQUAL TOTAL PAYMENTS

Years	Interest Rate												
	4%	4.5%	5%	5.5%	6%	6.5%	7%	7.5%	8%	8.5%	9%	9.5%	10%
1	1.04000	1.04500	1.05000	1.05500	1.06000	1.06500	1.07000	1.07500	1.08000	1.08500	1.09000	1.09500	1.10000
2	0.53020	0.53400	0.53780	0.54162	0.54544	0.54926	0.55309	0.55693	0.56077	0.56462	0.56847	0.57233	0.57619
3	0.36035	0.36377	0.36721	0.37065	0.37411	0.37758	0.38105	0.38454	0.38803	0.39154	0.39505	0.39858	0.40211
4	0.27549	0.27874	0.28201	0.28529	0.28859	0.29190	0.29523	0.29857	0.30192	0.30529	0.30867	0.31206	0.31547
5	0.22463	0.22779	0.23097	0.23418	0.23740	0.24063	0.24389	0.24716	0.25046	0.25377	0.25709	0.26044	0.26380
6	0.19076	0.19388	0.19702	0.20018	0.20336	0.20657	0.20980	0.21304	0.21632	0.21961	0.22292	0.22625	0.22961
7	0.16661	0.16970	0.17282	0.17596	0.17914	0.18233	0.18555	0.18880	0.19207	0.19537	0.19869	0.20204	0.20541
8	0.14853	0.15161	0.15472	0.15786	0.16104	0.16424	0.16747	0.17073	0.17401	0.17733	0.18067	0.18405	0.18744
9	0.13449	0.13757	0.14069	0.14384	0.14702	0.15024	0.15349	0.15677	0.16008	0.16342	0.16680	0.17020	0.17364
10	0.12329	0.12638	0.12950	0.13267	0.13587	0.13910	0.14238	0.14569	0.14903	0.15241	0.15582	0.15927	0.16275
11	0.11415	0.11725	0.12039	0.12357	0.12679	0.13006	0.13336	0.13670	0.14008	0.14349	0.14695	0.15044	0.15396
12	0.10655	0.10967	0.11283	0.11603	0.11928	0.12257	0.12590	0.12928	0.13270	0.13615	0.13965	0.14319	0.14676
13	0.10014	0.10328	0.10646	0.10968	0.11296	0.11628	0.11965	0.12306	0.12652	0.13002	0.13357	0.13715	0.14078
14	0.09467	0.09782	0.10102	0.10428	0.10758	0.11094	0.11434	0.11780	0.12130	0.12484	0.12843	0.13207	0.13575
15	0.08994	0.09311	0.09634	0.09963	0.10296	0.10635	0.10979	0.11329	0.11683	0.12042	0.12406	0.12774	0.13147
16	0.08582	0.08902	0.09227	0.09558	0.09895	0.10238	0.10586	0.10939	0.11298	0.11661	0.12030	0.12403	0.12782
17	0.08220	0.08542	0.08870	0.09204	0.09544	0.09891	0.10243	0.10600	0.10963	0.11331	0.11705	0.12083	0.12466
18	0.07899	0.08224	0.08555	0.08892	0.09236	0.09585	0.09941	0.10303	0.10670	0.11043	0.11421	0.11805	0.12193
19	0.07614	0.07941	0.08275	0.08615	0.08962	0.09316	0.09675	0.10041	0.10413	0.10790	0.11173	0.11561	0.11955
20	0.07358	0.07688	0.08024	0.08368	0.08718	0.09076	0.09439	0.09809	0.10185	0.10567	0.10955	0.11348	0.11746
21	0.07128	0.07460	0.07800	0.08146	0.08500	0.08861	0.09229	0.09603	0.09983	0.10370	0.10762	0.11159	0.11562
22	0.06920	0.07255	0.07597	0.07947	0.08305	0.08669	0.09041	0.09419	0.09803	0.10194	0.10590	0.10993	0.11401
23	0.06731	0.07068	0.07414	0.07767	0.08128	0.08496	0.08871	0.09254	0.09642	0.10037	0.10438	0.10845	0.11257
24	0.06559	0.06899	0.07247	0.07604	0.07968	0.08340	0.08719	0.09105	0.09498	0.09897	0.10302	0.10713	0.11130
25	0.06401	0.06744	0.07095	0.07455	0.07823	0.08198	0.08581	0.08971	0.09368	0.09771	0.10181	0.10596	0.11017
30	0.05783	0.06139	0.06505	0.06881	0.07265	0.07658	0.08059	0.08467	0.08883	0.09305	0.09734	0.10168	0.10608
35	0.05358	0.05727	0.06107	0.06497	0.06897	0.07306	0.07723	0.08148	0.08580	0.09019	0.09464	0.09914	0.10369
40	0.05052	0.05434	0.05828	0.06232	0.06646	0.07069	0.07501	0.07940	0.08386	0.08838	0.09296	0.09759	0.10226