

UNIVERSITI SAINS MALAYSIA

Peperiksaan Semester Kedua
Sidang 1989/90

Mac/April 1989

AKU 302 - Pasaran dan Institusi Kewangan

Masa : [3 Jam]

ARAHAN:

Jawab SEPULUH soalan semuanya. Pilih dan jawab LIMA soalan dari TUJUH soalan daripada Bahagian A. Jawab SEMUA soalan daripada Bahagian B dan Bahagian C.

BAHAGIAN A

1. Apakah peranan utama perantaraan kewangan? Senaraikan perkhidmatan-perkhidmatan (fungsi) perantaraan kewangan dan terangkan secara ringkas kesemua perkhidmatan tersebut.
[10 markah]
2. Apakah perbezaan di antara pasaran asas (primary market) dan pasaran peringkat kedua (secondary market) dan apakah fungsi-fungsi pasaran tersebut? Senaraikan sekuriti-sekuriti asas utama yang dibeli oleh perantaraan kewangan.
[10 markah]
3. Pertalian bank serta lain-lain institusi kewangan dengan pelanggan institusi kewangan boleh dianggap baik dan lebih berkekalan daripada pertalian pembekal barangan ataupun perkhidmatan dengan pelanggan pembekal dalam mana-mana industri (pengecualian mungkin ada). Adakah anda berpendapat ~~ia~~ baik atau buruk?
[10 markah]

...2/-

4. Terangkan perbezaan di antara pelaburan kasar dan pelaburan bersih. Daripada semua jenis pelaburan, pelaburan inventori nampaknya kurang dipengaruhi oleh kadar faedah. Kenapa?
[10 markah]
5. Jika simpanan diamatkan oleh gulungan berpendapatan tinggi, pendapatan kelihatan seperti ianya menentukan simpanan lebih daripada kadar faedah. Tetapi, kalau ianya benar, kenapakah tidak terdapatnya pertambahan di dalam kadar simpanan?
[10 markah]
6. Terangkan bagaimana kadar faedah nominal boleh naik walaupun kadar faedah sebenarnya menurun. Apakah kaitannya pula harga bon belum jelas yang menurun dengan kadar faedah pasaran yang naik?
[10 markah]
7. Apakah kebaikan kepada sesebuah negara itu kalau negara-negara lain mengambil mata wangnya sebagai mata wang rezab? Apakah keburukan jika ada yang terdapat di dalam hal ini?
[10 markah]

BAHAGIAN B

8. Minden Banking Bhd membiayai pembelian kenderaan \$6,000 selama 3 tahun dengan faedah sebanyak 7 peratus. Kira bayaran bulanan dan hasil berkesan di atas pinjaman kenderaan tersebut.
[5 markah]
9. Satu gadaian telah diluluskan dan bayaran balik \$80,000 atas 7 peratus bertambah adalah melalui bayaran bulanan selama 30 tahun. Institusi yang mengeluarkan gadaian tersebut mengenakan tiga "mata" atas gadaian baru dikeluarkan. Apakah hasil di atas gadaian tersebut jika ia dianggarkan dipegang sehingga ianya matang?
[5 markah]

10. Anda diberikan maklumat berikut. Anda dikehendaki menilai dengan menggunakan tiga kaedah analisa kredit.

Ciri-Ciri Jangkaan Pinjaman

Jumlah pinjaman	\$ 10,000
Tahun matang	3
Kadar faedah pinjaman	12.00%
Kos pra cukai dana	10.00%
Belanja kutipan pinjaman biasa	\$ 10.00
Belanja kutipan kerugian pinjaman	\$ 1,000
Jumlah penerimaan semula kerugian pinjaman	\$ 1,000
Kadar cukai pendapatan	46.00%
Bilangan pemohon	1,000
Kadar penerimaan	70.00%
Kualiti pemohon	80.00%
Kos pemohon	\$ 15,000
Kos analisa kredit	\$ 50,000
Kadar perhitungan analisa kredit	5.00%
Kos perhitungan kredit	\$ 40,000
Ketepatan perhitungan kredit - pinjaman beruntung	85.00%
Ketepatan perhitungan kredit - kerugian pinjaman	85.00%

[10 markah]

11. Gunakan formula asas untuk nilai hadapan bersama-sama dengan kadar faedah yang diberikan, k dan bilangan tempoh, n bagi mengira faktor faedah nilai hadapan di dalam setiap kes berikut.

Kes ---	Kadar Faedah k (%) -----	Bilangan Tempoh n -----
A	12	2
B	6	3
C	9	2
D	3	4

[10 markah]

BAHAGIAN C

12. [i] Bandingkan operasi institusi kewangan dengan institusi bukan kewangan.
[ii] Bincangkan apa yang anda faham tentang M₁, M₂ dan M₃.

[iii] Apakah jenis-jenis sistem kewangan. Pada pandangan anda jenis manakah yang diamalkan oleh negara kita. Kenapakah bank pusat diwujudkan di negara kita?

[20 markah]

LAMPIRAN A

Interest Rate of 1/2 Percent

Compound amount						Present value							
Compound amount	Present value	Annuity compound amount	Annuity present value	Payment		Compound amount	Present value	Annuity compound amount	Annuity present value	Payment			
Future value of a present amount	Present value of a future amount	Future value of an annuity	Present value of an annuity	Annuity repaying a present amount		Future value of a present amount	Present value of a future amount	Future value of an annuity	Present value of an annuity	Annuity repaying a present amount			
<i>n</i>	FV	PV	AFV	APV	PAY	<i>n</i>	FV	PV	AFV	APV	PAY	<i>n</i>	
1	1.0050	.9950	1.0000	.9950	1.0050	1	48	1.2705	.7871	54.0978	42.5803	.0235	48
2	1.0100	.9901	2.0050	1.9851	.5038	2	60	1.3489	.7414	69.7700	51.7256	.0193	60
3	1.0151	.9851	3.0150	2.9702	.3367	3	72	1.4320	.6983	86.4089	60.3395	.0166	72
4	1.0202	.9802	4.0301	3.9505	.2531	4	84	1.5204	.6577	104.0739	68.4530	.0146	84
5	1.0253	.9754	5.0503	4.9529	.2030	5	96	1.6141	.6195	122.8285	76.0952	.0131	96
6	1.0304	.9705	6.0755	5.8964	.1696	6	108	1.7137	.5835	142.7399	83.2934	.0120	108
7	1.0355	.9657	7.1059	6.8621	.1457	7	120	1.8194	.5496	163.8793	90.0735	.0111	120
8	1.0407	.9609	8.1414	7.8230	.1278	8	132	1.9316	.5177	186.3226	96.4596	.0104	132
9	1.0459	.9561	9.1821	8.7791	.1139	9	144	2.0508	.4876	210.1502	102.4747	.0098	144
10	1.0511	.9513	10.2280	9.7304	.1028	10	156	2.1772	.4593	235.4473	108.1404	.0092	156
11	1.0564	.9466	11.2792	10.6770	.0937	11	168	2.3115	.4326	262.3048	113.4770	.0088	168
12	1.0617	.9419	12.3356	11.6189	.0861	12	180	2.4541	.4075	290.8187	118.5035	.0084	180
13	1.0670	.9372	13.3972	12.5562	.0796	13	192	2.6055	.3838	321.0913	123.2380	.0081	192
14	1.0723	.9326	14.4642	13.4887	.0741	14	204	2.7662	.3615	353.2311	127.6975	.0078	204
15	1.0777	.9279	15.5365	14.4166	.0694	15	216	2.9368	.3405	387.3532	131.8979	.0076	216
16	1.0831	.9233	16.6142	15.3399	.0652	16	228	3.1179	.3207	423.5799	135.8542	.0074	228
17	1.0885	.9187	17.6973	16.2586	.0615	17	240	3.3102	.3021	462.0409	139.5808	.0072	240
18	1.0939	.9141	18.7858	17.1728	.0582	18	252	3.5144	.2845	502.8741	143.0908	.0070	252
19	1.0994	.9096	19.8797	18.0824	.0553	19	264	3.7311	.2680	546.2259	146.3969	.0068	264
20	1.1049	.9051	20.9791	18.9874	.0527	20	276	3.9613	.2524	592.2514	149.5110	.0067	276
21	1.1104	.9006	22.0840	19.8880	.0503	21	288	4.2056	.2378	641.1158	152.4441	.0066	288
22	1.1160	.8961	23.1944	20.7841	.0481	22	300	4.4650	.2240	692.9940	155.2069	.0064	300
23	1.1216	.8916	24.3104	21.6757	.0461	23	312	4.7404	.2110	748.0719	157.8091	.0063	312
24	1.1272	.8872	25.4320	22.5629	.0443	24	324	5.0327	.1987	806.5469	160.2602	.0062	324
25	1.1328	.8828	26.5591	23.4456	.0427	25	336	5.3431	.1872	868.6285	162.5688	.0062	336
26	1.1385	.8784	27.6919	24.3240	.0411	26	348	5.6727	.1763	934.5392	164.7434	.0061	348
27	1.1442	.8740	28.8304	25.1980	.0397	27	360	6.0226	.1660	1004.5150	166.7916	.0060	360
28	1.1499	.8697	29.9745	26.0677	.0384	28	∞				200.0000	.0050	∞
29	1.1556	.8653	31.1244	26.9330	.0371	29							
30	1.1614	.8610	32.2800	27.7941	.0360	30							
31	1.1672	.8567	33.4414	28.6508	.0349	31							
32	1.1730	.8525	34.6086	29.5033	.0339	32							
33	1.1789	.8482	35.7817	30.3515	.0329	33							
34	1.1849	.8440	36.9606	31.1955	.0321	34							
35	1.1907	.8398	38.1454	32.0354	.0312	35							
36	1.1967	.8356	39.3361	32.8710	.0304	36							

LAMPIRAN B

Interest Rate of ½ Percent

Interest Rate of ½ Percent						Interest Rate of ½ Percent							
Compound amount	Present value	Annuity compound amount	Annuity present value	Payment		Compound amount	Present value	Annuity compound amount	Annuity present value	Payment			
Future value of a present amount	Present value of a future amount	Future value of an annuity	Present value of an annuity	Annuity repaying a present amount	n	Future value of a present amount	Present value of a future amount	Future value of an annuity	Present value of an annuity	Annuity repaying a present amount	n		
FV	PV	AFV	APV	PAY	n	FV	PV	AFV	APV	PAY	n		
1	1.0067	.9934	1.0000	.9934	1.0067	1	48	1.3757	.7269	56.3499	40.9619	.0244	48
2	1.0134	.9868	2.0067	1.9802	.5050	2	60	1.4898	.6712	73.4769	49.3184	.0203	60
3	1.0201	.9803	3.0200	2.9604	.3378	3	72	1.6135	.6198	92.0253	57.0345	.0175	72
4	1.0269	.9738	4.0402	3.9342	.2542	4	84	1.7474	.5723	112.1133	64.1593	.0156	84
5	1.0338	.9673	5.0671	4.9015	.2040	5	96	1.8925	.5284	133.8686	70.7380	.0141	96
6	1.0407	.9609	6.1009	5.8625	.1706	6	108	2.0495	.4879	157.4295	76.8125	.0130	108
7	1.0476	.9546	7.1416	6.8170	.1467	7	120	2.2196	.4505	182.9460	82.4215	.0121	120
8	1.0546	.9482	8.1892	7.7652	.1288	8	132	2.4039	.4160	210.5804	87.6006	.0114	132
9	1.0616	.9420	9.2438	8.7072	.1148	9	144	2.6034	.3841	240.5084	92.3928	.0108	144
10	1.0687	.9357	10.3054	9.6429	.1037	10	156	2.8195	.3547	272.9204	96.7985	.0103	156
11	1.0758	.9295	11.3741	10.5724	.0946	11	168	3.0535	.3275	308.0226	100.8758	.0099	168
12	1.0830	.9234	12.4499	11.4958	.0870	12	180	3.3069	.3024	346.0382	104.6406	.0096	180
13	1.0902	.9172	13.5329	12.4130	.0806	13	192	3.5814	.2792	387.2092	108.1169	.0092	192
14	1.0975	.9112	14.6231	13.3242	.0751	14	204	3.8786	.2578	431.7973	111.3267	.0090	204
15	1.1048	.9051	15.7206	14.2293	.0703	15	216	4.2006	.2381	480.0861	114.2906	.0087	216
16	1.1122	.8991	16.8254	15.1285	.0661	16	228	4.5492	.2198	532.3830	117.0273	.0085	228
17	1.1196	.8932	17.9376	16.0217	.0624	17	240	4.9268	.2030	589.0204	119.5543	.0084	240
18	1.1270	.8873	19.0572	16.9089	.0591	18	252	5.3357	.1874	650.3588	121.8876	.0082	252
19	1.1346	.8814	20.1842	17.7903	.0562	19	264	5.7786	.1731	716.7882	124.0421	.0081	264
20	1.1421	.8756	21.3188	18.6659	.0536	20	276	6.2582	.1598	788.7312	126.0315	.0079	276
21	1.1497	.8698	22.4609	19.5357	.0512	21	288	6.7776	.1475	866.6454	127.8684	.0078	288
22	1.1574	.8640	23.6107	20.3997	.0490	22	300	7.3402	.1362	951.0265	129.5645	.0077	300
23	1.1651	.8583	24.7681	21.2579	.0470	23	312	7.9494	.1258	1042.4111	131.1307	.0076	312
24	1.1729	.8526	25.9332	22.1105	.0452	24	324	8.6092	.1162	1141.3807	132.5768	.0075	324
25	1.1807	.8470	27.1061	22.9575	.0436	25	336	9.3238	.1073	1248.5646	133.9121	.0075	336
26	1.1886	.8413	28.2868	23.7988	.0420	26	348	10.0976	.0990	1364.6448	135.1450	.0074	348
27	1.1965	.8358	29.4754	24.6346	.0406	27	360	10.9357	.0914	1490.3596	136.2835	.0073	360
28	1.2045	.8302	30.6719	25.4648	.0393	28	∞				150.0000	.0067	∞
29	1.2125	.8247	31.8763	26.2896	.0380	29							
30	1.2206	.8193	33.0889	27.1088	.0369	30							
31	1.2287	.8138	34.3094	27.9227	.0358	31							
32	1.2369	.8085	35.5382	28.7312	.0348	32							
33	1.2452	.8031	36.7751	29.5343	.0339	33							
34	1.2535	.7978	38.0203	30.3320	.0330	34							
35	1.2618	.7925	39.2727	31.1248	.0322	35							
36	1.2702	.7873	40.5356	31.9118	.0313	36							

LAMPIRAN C

Interest Rate of 1.00 Percent

Compound amount		Present value	Annuity compound amount	Annuity present value	Payment								
Future value of a present amount		Present value of a future amount	Future value of an annuity	Present value of an annuity	Annuity repaying a present amount								
<i>n</i>	FV	PV	AFV	APV	PAY	<i>n</i>	FV	PV	AFV	APV	PAY	<i>n</i>	
1	1.0100	.9901	1.0000	.9901	1.0100	1	48	1.6122	.6203	61.2226	37.9740	.0263	48
2	1.0201	.9803	2.0100	1.9704	.5075	2	60	1.8167	.5504	81.6697	44.9550	.0222	60
3	1.0303	.9706	3.0301	2.9410	.3400	3	72	2.0471	.4885	104.7099	51.1504	.0196	72
4	1.0406	.9610	4.0604	3.9020	.2563	4	84	2.3067	.4335	130.6723	56.6485	.0177	84
5	1.0510	.9515	5.1010	4.8534	.2060	5	96	2.5993	.3847	159.9273	61.5277	.0163	96
6	1.0615	.9420	6.1520	5.7955	.1725	6	108	2.9289	.3414	192.8926	65.8578	.0152	108
7	1.0721	.9327	7.2135	6.7282	.1486	7	120	3.3004	.3030	230.0387	69.7005	.0143	120
8	1.0829	.9235	8.2857	7.6517	.1307	8	132	3.7190	.2689	271.8959	73.1108	.0137	132
9	1.0937	.9143	9.3685	8.5660	.1167	9	144	4.1906	.2386	319.0616	76.1372	.0131	144
10	1.1046	.9053	10.4622	9.4713	.1056	10	156	4.7221	.2118	372.2091	78.8229	.0127	156
11	1.1157	.8963	11.5668	10.3676	.0965	11	168	5.3210	.1879	432.0970	81.2064	.0123	168
12	1.1268	.8874	12.6825	11.2551	.0888	12	180	5.9958	.1668	499.5802	83.3217	.0120	180
13	1.1381	.8787	13.8093	12.1337	.0824	13	192	6.7562	.1480	575.6220	85.1988	.0117	192
14	1.1495	.8700	14.9474	13.0037	.0769	14	204	7.6131	.1314	661.3078	86.8647	.0115	204
15	1.1610	.8613	16.0969	13.8651	.0721	15	216	8.5786	.1166	757.8606	88.3431	.0113	216
16	1.1726	.8528	17.2579	14.7179	.0679	16	228	9.6666	.1034	866.6588	89.6551	.0112	228
17	1.1843	.8444	18.4304	15.5623	.0643	17	240	10.8926	.0918	989.2554	90.8194	.0110	240
18	1.1961	.8360	19.6147	16.3983	.0610	18	252	12.2740	.0815	1127.4002	91.8527	.0109	252
19	1.2081	.8277	20.8109	17.2260	.0581	19	264	13.8307	.0723	1283.0653	92.7697	.0108	264
20	1.2202	.8195	22.0190	18.0456	.0554	20	276	15.5847	.0642	1458.4726	93.5835	.0107	276
21	1.2324	.8114	23.2392	18.8570	.0530	21	288	17.5613	.0569	1656.1259	94.3056	.0106	288
22	1.2447	.8034	24.4716	19.6604	.0509	22	300	19.7885	.0505	1878.8466	94.9466	.0105	300
23	1.2572	.7954	25.7163	20.4558	.0489	23	312	22.2981	.0448	2129.8139	95.5153	.0105	312
24	1.2697	.7876	26.9735	21.2434	.0471	24	324	25.1261	.0398	2412.6101	96.0201	.0104	324
25	1.2824	.7798	28.2432	22.0232	.0454	25	336	28.3127	.0353	2731.2720	96.4680	.0104	336
26	1.2953	.7720	29.5256	22.7952	.0439	26	348	31.9035	.0313	3090.3481	96.8655	.0103	348
27	1.3082	.7644	30.8209	23.5596	.0424	27	360	35.9496	.0278	3494.9641	97.2183	.0103	360
28	1.3213	.7568	32.1291	24.3164	.0411	28	∞				100.0000	.0100	∞
29	1.3345	.7493	33.4504	25.0658	.0399	29							
30	1.3478	.7419	34.7849	25.8077	.0387	30							
31	1.3613	.7346	36.1327	26.5423	.0377	31							
32	1.3749	.7273	37.4941	27.2696	.0367	32							
33	1.3887	.7201	38.8690	27.9897	.0357	33							
34	1.4026	.7130	40.2577	28.7027	.0348	34							
35	1.4166	.7059	41.6603	29.4086	.0340	35							

LAMPIRAN D

Interest Rate of 1.25 Percent

Compound amount						Present value							
Compound amount	Present value	Annuity compound amount	Annuity present value	Payment		Compound amount	Present value	Annuity compound amount	Annuity present value	Payment			
Future value of a present amount	Present value of a future amount	Future value of an annuity	Present value of an annuity	Annuity repaying a present amount	n	Future value of a present amount	Present value of a future amount	Future value of an annuity	Present value of an annuity	Annuity repaying a present amount	n		
FV	PV	AFV	APV	PAY	n	FV	PV	AFV	APV	PAY	n		
1	1.0125	.9877	1.0000	.9877	1.0125	1	48	1.8154	.5509	65.2284	35.9315	.0278	48
2	1.0252	.9755	2.0125	1.9631	.5094	2	60	2.1072	.4746	88.5745	42.0346	.0238	60
3	1.0380	.9634	3.0377	2.9265	.3417	3	72	2.4459	.4088	115.6736	47.2925	.0211	72
4	1.0509	.9515	4.0756	3.8781	.2579	4	84	2.8391	.3522	147.1290	51.8222	.0193	84
5	1.0641	.9398	5.1266	4.9178	.2076	5	96	3.2955	.3034	183.6411	55.7246	.0179	96
6	1.0774	.9282	6.1907	5.7460	.1740	6	108	3.8253	.2614	226.0226	59.0865	.0169	108
7	1.0909	.9167	7.2680	6.6627	.1501	7	120	4.4402	.2252	275.2171	61.9828	.0161	120
8	1.1045	.9054	8.3589	7.5681	.1321	8	132	5.1540	.1940	332.3198	64.4781	.0155	132
9	1.1183	.8942	9.4634	8.4623	.1182	9	144	5.9825	.1672	398.6021	66.6277	.0150	144
10	1.1323	.8832	10.5817	9.3455	.1070	10	156	6.9442	.1440	475.5395	68.4797	.0146	156
11	1.1464	.8723	11.7139	10.2178	.0979	11	168	8.0606	.1241	564.8450	70.0751	.0143	168
12	1.1608	.8615	12.8604	11.0793	.0903	12	180	9.3563	.1069	668.5068	71.4496	.0140	180
13	1.1753	.8509	14.0211	11.9302	.0838	13	192	10.8604	.0921	788.8328	72.6338	.0138	192
14	1.1900	.8404	15.1964	12.7706	.0783	14	204	12.6063	.0793	928.5014	73.6540	.0136	204
15	1.2048	.8300	16.3863	13.6005	.0735	15	216	14.6328	.0683	1090.6225	74.5328	.0134	216
16	1.2199	.8197	17.5912	14.4203	.0693	16	228	16.9851	.0589	1278.8054	75.2900	.0133	228
17	1.2351	.8096	18.8111	15.2299	.0657	17	240	19.7155	.0507	1497.2395	75.9423	.0132	240
18	1.2506	.7996	20.0462	16.0295	.0624	18	252	22.8848	.0437	1750.7879	76.5042	.0131	252
19	1.2662	.7898	21.2968	16.8193	.0595	19	264	26.5637	.0376	2045.0953	76.9884	.0130	264
20	1.2820	.7800	22.5630	17.5993	.0568	20	276	30.8339	.0324	2386.7139	77.4055	.0129	276
21	1.2981	.7704	23.8450	18.3697	.0544	21	288	35.7906	.0279	2783.2493	77.7648	.0129	288
22	1.3143	.7609	25.1431	19.1306	.0523	22	300	41.5441	.0241	3243.5296	78.0743	.0128	300
23	1.3307	.7515	26.4574	19.8820	.0503	23	312	48.2225	.0207	3777.8020	78.3410	.0128	312
24	1.3474	.7422	27.7881	20.6242	.0485	24	324	55.9745	.0179	4397.9611	78.5708	.0127	324
25	1.3642	.7330	29.1354	21.3573	.0468	25	336	64.9727	.0154	5117.8136	78.7687	.0127	336
26	1.3812	.7240	30.4996	22.0813	.0453	26	348	75.4173	.0133	5953.3856	78.9392	.0127	348
27	1.3985	.7150	31.8809	22.7963	.0439	27	360	87.5410	.0114	6923.2796	79.0861	.0126	360
28	1.4160	.7062	33.2794	23.5025	.0425	28	∞			80.0000	.0125	∞	
29	1.4337	.6975	34.6954	24.2000	.0413	29							
30	1.4516	.6889	36.1291	24.8889	.0402	30							
31	1.4698	.6804	37.5807	25.5693	.0391	31							
32	1.4881	.6720	39.0504	26.2413	.0381	32							
33	1.5067	.6637	40.5386	26.9050	.0372	33							
34	1.5256	.6555	42.0453	27.5605	.0363	34							
35	1.5446	.6474	43.5709	28.2079	.0355	35							
		.6393	45.1155	28.8473	.0348	∞							

LAMPIRAN E

Interest Rate of 11.00 Percent

Interest Rate of 12.00 Percent

Interest Rate of 11.00 Percent						Interest Rate of 12.00 Percent						
Compound amount	Present value	Annuity compound amount	Annuity present value	Payment		Compound amount	Present value	Annuity compound amount	Annuity present value	Payment		
Future value of a present amount	Present value of a future amount	Future value of an annuity	Present value of an annuity	Annuity repaying a present amount		Future value of a present amount	Present value of a future amount	Future value of an annuity	Present value of an annuity	Annuity repaying a present amount		
n	FV	PV	AFV	APV	PAY	n	FV	PV	AFV	APV	PAY	n
1	1.1100	.9009	1.0000	.9009	1.1100	1	1.1200	.8929	1.0000	.8929	1.1200	1
2	1.2321	.8116	2.1100	1.7125	.5839	2	1.2544	.7972	2.1200	1.6901	.5917	2
3	1.3676	.7312	3.3421	2.4437	.4092	3	1.4049	.7118	3.3744	2.4018	.4163	3
4	1.5181	.6587	4.7097	3.1024	.3223	4	1.5735	.6355	4.7793	3.0373	.3292	4
5	1.6851	.5935	6.2278	3.6959	.2706	5	1.7623	.5674	6.3528	3.6048	.2774	5
6	1.8704	.5346	7.9129	4.2305	.2364	6	1.9738	.5066	8.1152	4.1114	.2432	6
7	2.0762	.4817	9.7833	4.7122	.2122	7	2.2107	.4523	10.0890	4.5638	.2191	7
8	2.3045	.4339	11.8594	5.1461	.1943	8	2.4760	.4039	12.2997	4.9676	.2013	8
9	2.5580	.3909	14.1640	5.5370	.1806	9	2.7731	.3606	14.7757	5.3282	.1877	9
10	2.8394	.3522	16.7220	5.8892	.1698	10	3.1058	.3220	17.5487	5.6502	.1770	10
11	3.1518	.3173	19.5614	6.2065	.1611	11	3.4785	.2875	20.6546	5.9377	.1684	11
12	3.4985	.2858	22.7132	6.4924	.1540	12	3.8960	.2567	24.1331	6.1944	.1614	12
13	3.8833	.2575	26.2116	6.7499	.1482	13	4.3635	.2292	28.0291	6.4235	.1557	13
14	4.3104	.2320	30.0949	6.9819	.1432	14	4.8871	.2046	32.3926	6.6282	.1509	14
15	4.7846	.2090	34.4054	7.1909	.1391	15	5.4736	.1827	37.2797	6.8109	.1468	15
16	5.3109	.1883	39.1899	7.3792	.1355	16	6.1304	.1631	42.7533	6.9740	.1434	16
17	5.8951	.1696	44.5008	7.5488	.1325	17	6.8660	.1456	48.8837	7.1196	.1405	17
18	6.5436	.1528	50.3959	7.7016	.1298	18	7.6900	.1300	55.7497	7.2497	.1379	18
19	7.2633	.1377	56.9395	7.8393	.1276	19	8.6128	.1161	63.4397	7.3658	.1358	19
20	8.0623	.1240	64.2028	7.9633	.1256	20	9.6463	.1037	72.0524	7.4694	.1339	20
21	8.9492	.1117	72.2651	8.0751	.1238	21	10.8038	.0926	81.6987	7.5620	.1322	21
22	9.9336	.1007	81.2143	8.1757	.1223	22	12.1003	.0826	92.5026	7.6446	.1308	22
23	11.0263	.0907	91.1479	8.2664	.1210	23	13.5523	.0738	104.6029	7.7184	.1296	23
24	12.2392	.0817	102.1742	8.3481	.1198	24	15.1786	.0659	118.1552	7.7843	.1285	24
25	13.5855	.0736	114.4133	8.4217	.1187	25	17.0001	.0588	133.3339	7.8431	.1275	25
26	15.0799	.0663	127.9988	8.4881	.1178	26	19.0401	.0525	150.3339	7.8957	.1267	26
27	16.7386	.0597	143.0786	8.5478	.1170	27	21.3249	.0469	169.3740	7.9426	.1259	27
28	18.5799	.0538	159.6173	8.6016	.1163	28	23.8839	.0419	190.6989	7.9844	.1252	28
29	20.6237	.0485	178.3972	8.6501	.1156	29	26.7499	.0374	214.5828	8.0218	.1247	29
30	22.8923	.0437	199.0209	8.6938	.1150	30	29.9599	.0334	241.3327	8.0552	.1241	30
35	38.5749	.0259	341.5896	8.8552	.1129	35	52.7996	.0189	431.6635	8.1755	.1223	35
40	65.0009	.0154	581.8261	8.9511	.1117	40	93.0510	.0107	767.0914	8.2438	.1213	40
50	109.5200	.0091	986.0000	9.0417	.1106	50	169.0022	.0035	1356.2300	8.3045	.1204	50
55	134.5648	.0054	1068.7712	9.0617	.1104	55	509.3206	.0020	4236.0050	8.3170	.1202	55
60	524.0572	.0019	4755.0658	9.0736	.1102	60	897.5969	.0011	7471.6411	8.3240	.1201	60
∞				9.0909	.1100	∞				8.3333	.1200	∞

