



JUNE EXAMINATION

PROGRAMME : HUMAN MOVEMENT STUDIES

MODULE NAME : SPORT FINANCE

MODULE CODE : MBK3C02

DATE : JUNE 2014

DURATION : 1 ½ HOURS

TOTAL MARKS : 75 MARKS

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MODERATOR : MR K THOMAS

NUMBER OF PAGES : THIS PAPER CONSISTS OF THIRTEEN (13) PAGES

INSTRUCTIONS TO CANDIDATES:

MAKE SURE THAT YOU HAVE THE COMPLETE PAPER.

ANSWER ALL THE QUESTIONS.

QUESTION 1 [20 marks]

REQUIRED:

Answer the following questions by choosing the correct answer. Write the **letter** you have chosen as your answer next to the question number.

1.1 The current Minister of Finance of South Africa is:

- A. Trevor Manuel
- B. Tito Mboweni
- C. Pravin Gordhan
- D. Gill Marcus

(2)

1.2 Determine which of the following statements are **CORRECT**?

- (i) In Financial Accounting, information is generally expressed in monetary terms, whereas in Financial Management the focus is *also* on non-monetary information.
- (ii) Companies are not legally obliged to prepare Financial Management accounts.
- (iii) Financial Management ignores the concept of risk.
- (iv) Financial Management is aimed at the future, whereas Financial Accounting focuses on the past.

- A. Statements (i) and (iii) are correct
- B. Statements (i), (ii) and (iv) are correct
- C. Statements (ii), (iii) and (iv) are correct
- D.

 If the statements are correct

A
(2)

1.3 Identify which one of the following entities is likely to encounter the highest agency cost.

- A. Small local operation
- B. Partnership between brothers
- C. Medium sized Government department
- D.

 Large public listed company

L
(2)

1.4 Identify which one of the following is NOT an internal stakeholder of the Tornadoes rugby union.

- A The Tornadoes management team
- B The players union consisting of Tornadoes rugby players
- C The suppliers of Tornadoes
- D The employees of Tornadoes

(2)

1.5 Identify which **ONE** of the following is relevant for a decision by Wimbledon Greens to convert 3 unused tennis courts into a bowling green.

- A The cost of a feasibility survey performed last year
 - B The fixed monthly salary of the gardener of the club that will maintain the tennis courts and bowling green
 - C The cost of a new lawn mower that will be purchased especially for the bowling green
 - D The original cost of the land on which the tennis courts and bowling green is located
- (2)**

1.6 Timber Toys manufacture miniature cricket bats for various sport stores. Timber estimated the following average cost per bat:

Direct materials	R 8.65
Direct labour	R 1.10
Manufacturing overheads	R 0.95

Prime cost per unit is:

- A. R 8.65
 - B. R 9.75
 - C. R 2.05
 - D. R 9.60
- (2)**

1.7 Which of the following are manufacturing overheads of Bags-Creations Ltd? Bag-Creations manufacture punching bags for boxers to practice on.

- A Fifty metres of leather material
 - B One hundred metal zips that are twenty-five cm long
 - C Payment to seamstress of R5 per completed bag
 - D Monthly insurance paid on the imported sewing machines
- (2)**

1.8 Cost volume profit is:

- A used to determine how changes in costs and volume affect a company's operating income and net income
 - B a systematic method of examining the relationship between changes in activity and changes in total sales revenue, expenses and net profit in the short term
 - C Used to establish what will happen to financial results if a specified level of activity or volume fluctuates
 - D All of the above
- (2)**

1.9 Which of the following is TRUE of a budget?

- A Detailed plans of various activities within a company that is coordinated by the preparation of plans of action for future periods
 - B They are developed by examining business successes and failures
 - C They show what resources are needed and where revenue shortfalls may occur
 - D All of the above
- (2)**

1.10 Which of the following is TRUE regarding the advantages of using net present value (NPV)?

- A Target is subjectively set
 - B It takes time value of money into account
 - C Easy to use
 - D All of the above
- (2)**

QUESTION 2 **[14 marks]**

Gorilla Boys Sports Supplements are investigating whether to include a new protein supplement, P-power, for ladies. They plan to sell the P-power for R135 per tub and hope to sell at least 1 500 tubs over the year.

The cost per tub has been estimated as follows:

- Materials R25
- Manufacturing labour R10

Salaries are expected to be R 65 000 per month, rental for the warehouse will be R20 000 per month and other administrative expenses will be R25 300 per month. Materials and manufacturing labour is considered to vary with each product produced and the other costs are all fixed.

REQUIRED:

- 2.1 Calculate the contribution margin ratio? **(4)**
- 2.2 Determine how many tubs of P-power must be sold to earn a profit of R50 000? **(4)**
- 2.3 Determine how many tubs of P-power must be sold to break-even? **(2)**
- 2.4 If Gorilla Boys decides to introduce the new product, they plan to advertise it with a big marketing campaign that has an estimated cost of R80 000:
 - i. Determine the new break-even point (Rand amount) for this new level of sales? **(2)**
 - ii. Explain what this means for Gorilla Boys? (Discuss your recommendation to Gorilla Boys). **(2)**

QUESTION 3 **[11 marks]**

All Stars is a soccer team that participate in the local soccer league. The team has recently appointed a new coach. Since the appointment of the new coach, the team has shown a tremendous improvement and has qualified to participate in the international premier league special tournament two years from now.

The coach has signed a 4 year contract with no exit clause and will receive a fixed monthly salary of R85 000 per month for the next 4 years (48 months).

The cost to participate in the special tournament (in two years' time) has been estimated as follows:

Air tickets	R800 000
Accommodation	R400 000
Kit and other gear	R220 000

All Stars has also received various sponsorships to contract 2 top rated players before the special tournament. The top players have been identified and negotiations have started. The sponsorships amounted to R950 000 in total today.

One of the players has negotiated a special rate with NetCapital Bank who agreed that all investments that the team make with the bank will earn interest at 9% p.a compounded annually.

REQUIRED:

- 3.1 Determine the amount that All Stars should invest today to be able to pay the monthly salary of the coach for the next 4 years. Use the applicable formula. **(4)**
- 3.2 If NetCapital decreased the percentage interest earned on the money invested by All Stars, discuss the effect that it will have on the amount of money invested by All Stars today. **(1)**
- 3.3 Calculate the amount of money that must be invested today in order to save enough money for the team to travel to the special tournament after two years.
(Use the applicable table) **(3)**
- 3.4 Determine the amount that All Stars will have available to offer the top rated players if the money is received from the sponsors. Use the applicable formula. **(3)**

QUESTION 4

[15 marks]

Armour Apparel is a company that produces sportswear. The clothing ranges vary between summer or winter apparel.

The budgeted sales are then set out accordingly for the next year as follows:

First half: October to March R1 533 400

Second half: April to September R1 415 350

Additional information

- All sales are on account, but two thirds of all sales are collected in the half in which they occur and the remaining one third in the next half.
- All purchases of material are on a cash basis, and are estimated at being R370 000 in the first half of the year and R535 000 in the second half of the year.
- Direct labour costs and factory overheads of R770 000 are also paid during the second half of the year.
- Selling and administrative costs amount to R500 000 per semester (half a year).
- The company has entered into an agreement with Truce Bank to obtain financing so that in all circumstances there would be a minimum cash balance of R10 000.

At the beginning of the first quarter the company had the following balances in its books:

- o Cash R10 000
- o Sales debtors R250 000

REQUIRED:

- 4.1 You are required to prepare a cash budget for the four quarters that end on 30 September together with a schedule indicating the cash collections. **(9)**
- 4.2 Budgets can be very useful for managing finances of a business. List one advantage and one disadvantage of budgets. **(2)**
- 4.3 There are three budget processes. Identify and briefly explain two of these three processes. **(4)**

QUESTION 5

[15 marks]

The McKenna Cricket Oval has been a popular place to watch cricket games. Their luxury suites have been well-used and are constantly full. The average price to build one of these luxury suites was R3 000 000, 5 years ago. The luxury suites now cost R4 500 000 to build.

Due to the success of these luxury suites the management at McKenna must decide whether it wants to spend R4 500 000 each to construct 2 new luxury suites. They believe each suite will last for 3 years after which they will need to be revamped and upgraded. It is estimated that each luxury suite will be rented out and bring in the following income annually:

Year	Rental income
1	R1 420 000
2	R1 600 000
3	R1 850 000

- McKenna has an estimated a cost of capital (discount rate) of 8 %. They have a target accounting rate of return (ARR) of 25%.
- They have a payback target of 2 years.

Before making a decision, the management must decide whether this project will be beneficial or not.

REQUIRED:

- 5.1 Calculate the accounting rate of return (ARR) for the new luxury suites. (5)
- 5.2 Calculate the payback period for the new luxury suites. (4)
- 5.3 Calculate the value of building the new suites using the net present value (NPV), and provide a recommendation to management regarding their decision. (6)

TOTAL = 75

Formulae and Appendices / *Formules en Bylae* 2014

Time Value of Money Formulae

$$FV_n = PV_0(1+i)^n$$

$$FV_n = PV_0 \times FVIF_{i,n}$$

$$PV_0 = FV_n(1+i)^{-n}$$

$$PV_0 = FV_n \times PVIF_{i,n}$$

$$FVA = PMT \left[\frac{(1+i)^n - 1}{i} \right]$$

$$FVA = PMT \times FVIFA_{i,n}$$

$$PVA = PMT \left[\frac{1 - (1+i)^{-n}}{i} \right]$$

$$PVA = PMT \times PVIFA_{i,n}$$

$$FVAD = PMT \left[\frac{(1+i)^n - 1}{i} \right] (1+i)$$

$$FVA = PMT \times FVIFA_{i,n} \times (1+i)$$

$$PVAD = PMT \left[\frac{1 - (1+i)^{-n}}{i} \right] (1+i)$$

$$PVAD = PMT \times PVIFA_{i,n} \times (1+i)$$

Table 1: Future value of R1 at the end of n periods**Tabel 1: Toekomstige waarde van R1 aan die einde van n periodes**

n	0%	1%	2%	3%	4%	5%	6%	7%	8%	9%	10%	11%	12%	13%	14%	15%
1	1.0000	1.0100	1.0200	1.0300	1.0400	1.0500	1.0600	1.0700	1.0800	1.0900	1.1000	1.1100	1.1200	1.1300	1.1400	1.1500
2	1.0000	1.0201	1.0404	1.0609	1.0816	1.1025	1.1236	1.1449	1.1664	1.1881	1.21	1.2321	1.2544	1.2769	1.2996	1.3225
3	1.0000	1.0303	1.0612	1.0927	1.1249	1.1576	1.191	1.225	1.2597	1.295	1.331	1.3676	1.4049	1.4429	1.4815	1.5209
4	1.0000	1.0406	1.0824	1.1255	1.1699	1.2155	1.2625	1.3108	1.3605	1.4116	1.4641	1.5181	1.5735	1.6305	1.689	1.749
5	1.0000	1.051	1.1041	1.1593	1.2167	1.2763	1.3382	1.4026	1.4693	1.5386	1.6105	1.6851	1.7623	1.8424	1.9254	2.0114
6	1.0000	1.0615	1.1262	1.1941	1.2653	1.3401	1.4185	1.5007	1.5869	1.6771	1.7716	1.8704	1.9738	2.082	2.195	2.3131
7	1.0000	1.0721	1.1487	1.2299	1.3159	1.4071	1.5036	1.6058	1.7138	1.828	1.9487	2.0762	2.2107	2.3526	2.5023	2.66
8	1.0000	1.0829	1.1717	1.2668	1.3686	1.4775	1.5938	1.7182	1.8509	1.9926	2.1436	2.3045	2.476	2.6584	2.8526	3.059
9	1.0000	1.0937	1.1951	1.3048	1.4233	1.5513	1.6895	1.8385	1.999	2.1719	2.3579	2.558	2.7731	3.004	3.2519	3.5179
10	1.0000	1.1046	1.219	1.3439	1.4802	1.6289	1.7908	1.9672	2.1589	2.3674	2.5937	2.8394	3.1058	3.3946	3.7072	4.0456
11	1.0000	1.1157	1.2434	1.3842	1.5395	1.7103	1.8983	2.1049	2.3316	2.5804	2.8531	3.1518	3.4785	3.8359	4.2262	4.6524
12	1.0000	1.1268	1.2682	1.4258	1.601	1.7959	2.0122	2.2522	2.5182	2.8127	3.1384	3.4985	3.896	4.3345	4.8179	5.3503
13	1.0000	1.1381	1.2936	1.4685	1.6651	1.8856	2.1329	2.4098	2.7196	3.0658	3.4523	3.8833	4.3635	4.898	5.4924	6.1528
14	1.0000	1.1495	1.3195	1.5126	1.7317	1.9799	2.2609	2.5785	2.9372	3.3417	3.7975	4.3104	4.8871	5.5348	6.2613	7.0757
15	1.0000	1.161	1.3459	1.558	1.8009	2.0789	2.3966	2.759	3.1722	3.6425	4.1772	4.7846	5.4736	6.2543	7.1379	8.1371
16	1.0000	1.1726	1.3728	1.6047	1.873	2.1829	2.5404	2.9522	3.4259	3.9703	4.595	5.3109	6.1304	7.0673	8.1372	9.3576
17	1.0000	1.1843	1.4002	1.6528	1.9479	2.292	2.6928	3.1588	3.7	4.3276	5.0545	5.8951	6.866	7.9861	9.2765	10.7613
18	1.0000	1.1961	1.4282	1.7024	2.0258	2.4066	2.8543	3.3799	3.996	4.7171	5.5599	6.5436	7.69	9.0243	10.5752	12.3755
19	1.0000	1.2081	1.4568	1.7535	2.1068	2.527	3.0256	3.6165	4.3157	5.1417	6.1159	7.2633	8.6128	10.1974	12.0557	14.2318
20	1.0000	1.2202	1.4859	1.8061	2.1911	2.6533	3.2071	3.8697	4.661	5.6044	6.7275	8.0623	9.6463	11.5231	13.7435	16.3665
21	1.0000	1.2324	1.5157	1.8603	2.2788	2.786	3.3996	4.1406	5.0338	6.1088	7.4002	8.9492	10.8038	13.0211	15.6676	18.8215
22	1.0000	1.2447	1.546	1.9161	2.3699	2.9253	3.6035	4.4304	5.4365	6.6586	8.1403	9.9336	12.1003	14.7138	17.861	21.6447
23	1.0000	1.2572	1.5769	1.9736	2.4647	3.0715	3.8197	4.7405	5.8715	7.2579	8.9543	11.0263	13.5523	16.6266	20.3616	24.8915
24	1.0000	1.2697	1.6084	2.0328	2.5633	3.2251	4.0489	5.0724	6.3412	7.9111	9.8497	12.2392	15.1786	18.7881	23.2122	28.6252
25	1.0000	1.2824	1.6406	2.0938	2.6658	3.3864	4.2919	5.4274	6.8485	8.6231	10.8347	13.5855	17.0001	21.2305	26.4619	32.919
26	1.0000	1.2953	1.6734	2.1566	2.7725	3.5557	4.5494	5.8074	7.3964	9.3992	11.9182	15.0799	19.0401	23.9905	30.1666	37.8568
27	1.0000	1.3082	1.7069	2.2213	2.8834	3.7335	4.8223	6.2139	7.9881	10.2451	13.11	16.7386	21.3249	27.1093	34.3899	43.5353
28	1.0000	1.3213	1.741	2.2879	2.9987	3.9201	5.1117	6.6488	8.6271	11.1671	14.421	18.5799	23.8839	30.6335	39.2045	50.0656
29	1.0000	1.3345	1.7758	2.3566	3.1187	4.1161	5.4184	7.1143	9.3173	12.1722	15.8631	20.6237	26.7499	34.6158	44.6931	57.5755
30	1.0000	1.3478	1.8114	2.4273	3.2434	4.3219	5.7435	7.6123	10.0627	13.2677	17.4494	22.8923	29.9599	39.1159	50.9502	66.2118

Table 2: Present value of R1 at the end of n periods

Tabel 2: Huidige waarde van R1 aan die einde van n periodes

n	0%	1%	2%	3%	4%	5%	6%	7%	8%	9%	10%	11%	12%	13%	14%	15%
1	1.0000	0.9901	0.9804	0.9709	0.9615	0.9524	0.9434	0.9346	0.9259	0.9174	0.9091	0.9009	0.8929	0.885	0.8772	0.8696
2	1.0000	0.9803	0.9612	0.9426	0.9246	0.907	0.89	0.8734	0.8573	0.8417	0.8264	0.8116	0.7972	0.7831	0.7695	0.7561
3	1.0000	0.9706	0.9423	0.9151	0.889	0.8638	0.8396	0.8163	0.7938	0.7722	0.7513	0.7312	0.7118	0.6931	0.675	0.6575
4	1.0000	0.961	0.9238	0.8885	0.8548	0.8227	0.7921	0.7629	0.735	0.7084	0.683	0.6587	0.6355	0.6133	0.5921	0.5718
5	1.0000	0.9515	0.9057	0.8626	0.8219	0.7835	0.7473	0.713	0.6806	0.6499	0.6209	0.5935	0.5674	0.5428	0.5194	0.4972
6	1.0000	0.9420	0.8880	0.8375	0.7903	0.7462	0.705	0.6663	0.6302	0.5963	0.5645	0.5346	0.5066	0.4803	0.4556	0.4323
7	1.0000	0.9327	0.8706	0.8131	0.7599	0.7107	0.6651	0.6227	0.5835	0.547	0.5132	0.4817	0.4523	0.4251	0.3996	0.3759
8	1.0000	0.9235	0.8535	0.7894	0.7307	0.6768	0.6274	0.582	0.5403	0.5019	0.4665	0.4339	0.4039	0.3762	0.3506	0.3269
9	1.0000	0.9143	0.8368	0.7664	0.7026	0.6446	0.5919	0.5439	0.5002	0.4604	0.4241	0.3909	0.3606	0.3329	0.3075	0.2843
10	1.0000	0.9053	0.8203	0.7441	0.6756	0.6139	0.5584	0.5083	0.4632	0.4224	0.3855	0.3522	0.322	0.2946	0.2697	0.2472
11	1.0000	0.8963	0.8043	0.7224	0.6496	0.5847	0.5268	0.4751	0.4289	0.3875	0.3505	0.3173	0.2875	0.2607	0.2366	0.2149
12	1.0000	0.8874	0.7885	0.7014	0.6246	0.5568	0.497	0.444	0.3971	0.3555	0.3186	0.2858	0.2567	0.2307	0.2076	0.1869
13	1.0000	0.8787	0.773	0.681	0.6006	0.5303	0.4688	0.415	0.3677	0.3262	0.2897	0.2575	0.2292	0.2042	0.1821	0.1625
14	1.0000	0.8700	0.7579	0.6611	0.5775	0.5051	0.4423	0.3878	0.3405	0.2992	0.2633	0.232	0.2046	0.1807	0.1597	0.1413
15	1.0000	0.8613	0.743	0.6419	0.5553	0.481	0.4173	0.3624	0.3152	0.2745	0.2394	0.209	0.1827	0.1599	0.1401	0.1229
16	1.0000	0.8528	0.7284	0.6232	0.5339	0.4581	0.3936	0.3387	0.2919	0.2519	0.2176	0.1883	0.1631	0.1415	0.1229	0.1069
17	1.0000	0.8444	0.7142	0.605	0.5134	0.4363	0.3714	0.3166	0.2703	0.2311	0.1978	0.1696	0.1456	0.1252	0.1078	0.0929
18	1.0000	0.8360	0.7002	0.5874	0.4936	0.4155	0.3503	0.2959	0.2502	0.212	0.1799	0.1528	0.13	0.1108	0.0946	0.0808
19	1.0000	0.8277	0.6864	0.5703	0.4746	0.3957	0.3305	0.2765	0.2317	0.1945	0.1635	0.1377	0.1161	0.0981	0.0829	0.0703
20	1.0000	0.8195	0.673	0.5537	0.4564	0.3769	0.3118	0.2584	0.2145	0.1784	0.1486	0.124	0.1037	0.0868	0.0728	0.0611
21	1.0000	0.8114	0.6598	0.5375	0.4388	0.3589	0.2942	0.2415	0.1987	0.1637	0.1351	0.1117	0.0926	0.0768	0.0638	0.0531
22	1.0000	0.8034	0.6468	0.5219	0.422	0.3418	0.2775	0.2257	0.1839	0.1502	0.1228	0.1007	0.0826	0.068	0.056	0.0462
23	1.0000	0.7954	0.6342	0.5067	0.4057	0.3256	0.2618	0.2109	0.1703	0.1378	0.1117	0.0907	0.0738	0.0601	0.0491	0.0402
24	1.0000	0.7876	0.6217	0.4919	0.3901	0.3101	0.247	0.1971	0.1577	0.1264	0.1015	0.0817	0.0659	0.0532	0.0431	0.0349
25	1.0000	0.7798	0.6095	0.4776	0.3751	0.2953	0.233	0.1842	0.146	0.116	0.0923	0.0736	0.0588	0.0471	0.0378	0.0304
26	1.0000	0.7720	0.5976	0.4637	0.3607	0.2812	0.2198	0.1722	0.1352	0.1064	0.0839	0.0663	0.0525	0.0417	0.0331	0.0264
27	1.0000	0.7644	0.5859	0.4502	0.3468	0.2678	0.2074	0.1609	0.1252	0.0976	0.0763	0.0597	0.0469	0.0369	0.0291	0.023
28	1.0000	0.7568	0.5744	0.4371	0.3335	0.2551	0.1956	0.1504	0.1159	0.0895	0.0693	0.0538	0.0419	0.0326	0.0255	0.02
29	1.0000	0.7493	0.5631	0.4243	0.3207	0.2429	0.1846	0.1406	0.1073	0.0822	0.063	0.0485	0.0374	0.0289	0.0224	0.0174
30	1.0000	0.7419	0.5521	0.412	0.3083	0.2314	0.1741	0.1314	0.0994	0.0754	0.0573	0.0437	0.0334	0.0256	0.0196	0.0151

Table 3: Future value of an annuity of R1 per period for n periods

Tabel 3: Toekomstige waarde van 'n annuïteit van R1 per periode vir n periodes

n	1%	2%	3%	4%	5%	6%	7%	8%	9%	10%	11%	12%	13%	14%	15%
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	1.0000	1.0000
2	2.010	2.02	2.03	2.04	2.05	2.06	2.07	2.08	2.09	2.1	2.11	2.12	2.13	2.14	2.15
3	3.0301	3.0604	3.0909	3.1216	3.1525	3.1836	3.2149	3.2464	3.2781	3.31	3.3421	3.3744	3.4069	3.4396	3.4725
4	4.0604	4.1216	4.1836	4.2465	4.3101	4.3746	4.4399	4.5061	4.5731	4.641	4.7097	4.7793	4.8498	4.9211	4.9934
5	5.1010	5.204	5.3091	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	6.1520	6.3081	6.4684	6.633	6.8019	6.9753	7.1533	7.3359	7.5233	7.7156	7.9129	8.1152	8.3227	8.5355	8.7537
7	7.2135	7.4343	7.6625	7.8983	8.142	8.3938	8.654	8.9228	9.2004	9.4872	9.7833	10.089	10.4047	10.7305	11.0668
8	8.2857	8.583	8.8923	9.2142	9.5491	9.8975	10.2598	10.6366	11.0285	11.4359	11.8594	12.2997	12.7573	13.2328	13.7268
9	9.3685	9.7546	10.1591	10.5828	11.0266	11.4913	11.978	12.4876	13.021	13.5795	14.164	14.7757	15.4157	16.0853	16.7858
10	10.4622	10.9497	11.4639	12.0061	12.5779	13.1808	13.8164	14.4866	15.1929	15.9374	16.722	17.5487	18.4197	19.3373	20.3037
11	11.5668	12.1687	12.8078	13.4864	14.2068	14.9716	15.7836	16.6455	17.5603	18.5312	19.5614	20.6546	21.8143	23.0445	24.3493
12	12.6825	13.4121	14.192	15.0258	15.9171	16.8699	17.8885	18.9771	20.1407	21.3843	22.7132	24.1331	25.6502	27.2707	29.0017
13	13.8093	14.6803	15.6178	16.6268	17.713	18.8821	20.1406	21.4953	22.9534	24.5227	26.2116	28.0291	29.9847	32.0887	34.3519
14	14.9474	15.9739	17.0863	18.2919	19.5986	21.0151	22.5505	24.2149	26.0192	27.975	30.0949	32.3926	34.8827	37.5811	40.5047
15	16.0969	17.2934	18.5989	20.0236	21.5786	23.276	25.129	27.1521	29.3609	31.7725	34.4054	37.2797	40.4175	43.8424	47.5804
16	17.2579	18.6393	20.1569	21.8245	23.6575	25.6725	27.8881	30.3243	33.0034	35.9497	39.1899	42.7533	46.6717	50.9804	55.7175
17	18.4304	20.0121	21.7616	23.6975	25.8404	28.2129	30.8402	33.7502	36.9737	40.5447	44.5008	48.8837	53.7391	59.1176	65.0751
18	19.6147	21.4123	23.4144	25.6454	28.1324	30.9057	33.999	37.4502	41.3013	45.5992	50.3959	55.7497	61.7251	68.3941	75.8364
19	20.8109	22.8406	25.1169	27.6712	30.539	33.76	37.379	41.4463	46.0185	51.1591	56.9395	63.4397	70.7494	78.9692	88.2118
20	22.019	24.2974	26.8704	29.7781	33.066	36.7856	40.9955	45.762	51.1601	57.275	64.2028	72.0524	80.9468	91.0249	102.4436
21	23.2392	25.7833	28.6765	31.9692	35.7193	39.9927	44.8652	50.4229	56.7645	64.0025	72.2651	81.6987	92.4699	104.7684	118.8101
22	24.4716	27.299	30.5368	34.248	38.5052	43.3923	49.0057	55.4568	62.8733	71.4027	81.2143	92.5026	105.491	120.436	137.6316
23	25.7163	28.845	32.4529	36.6179	41.4305	46.9958	53.4361	60.8933	69.5319	79.543	91.1479	104.6029	120.2048	138.297	159.2764
24	26.9735	30.4219	34.4265	39.0826	44.502	50.8156	58.1767	66.7648	76.7898	88.4973	102.1742	118.1552	136.8315	158.6586	184.1678
25	28.2432	32.0303	36.4593	41.6459	47.7271	54.8645	63.249	73.1059	84.7009	98.3471	114.4133	133.3339	155.6196	181.8708	212.793
26	29.5256	33.6709	38.553	44.3117	51.1135	59.1564	68.6765	79.9544	93.324	109.1818	127.9988	150.3339	176.8501	208.3327	245.712
27	30.8209	35.3443	40.7096	47.0842	54.6691	63.7058	74.4838	87.3508	102.7231	121.0999	143.0786	169.374	200.8406	238.4993	283.5688
28	32.1291	37.0512	42.9309	49.9676	58.4026	68.5281	80.6977	95.3388	112.9682	134.2099	159.8173	190.6989	227.9499	272.8892	327.1041
29	33.4504	38.7922	45.2189	52.9663	62.3227	73.6398	87.3465	103.9659	124.1354	148.6309	178.3972	214.5828	258.5834	312.0937	377.1697
30	34.7849	40.5681	47.5754	56.0849	66.4388	79.0582	94.4608	113.2832	136.3075	164.494	199.0209	241.3327	293.1992	356.7868	434.7451

Table 4: Present value of an annuity of R1 per period for n periods

Tabel 4: Huidige waarde van 'n annuïteit van R1 per periode vir n periodes

n	1%	2%	3%	4%	5%	6%	7%	8%	9%	10%	11%	12%	13%	14%	15%
1	0.9901	0.9804	0.9709	0.9615	0.9524	0.9434	0.9346	0.9259	0.9174	0.9091	0.9009	0.8929	0.885	0.8772	0.8696
2	1.9704	1.9416	1.9135	1.8861	1.8594	1.8334	1.808	1.7833	1.7591	1.7355	1.7125	1.6901	1.6681	1.6467	1.6257
3	2.941	2.8839	2.8286	2.7751	2.7232	2.673	2.6243	2.5771	2.5313	2.4869	2.4437	2.4018	2.3612	2.3216	2.2832
4	3.902	3.8077	3.7171	3.6299	3.546	3.4651	3.3872	3.3121	3.2397	3.1699	3.1024	3.0373	2.9745	2.9137	2.855
5	4.8534	4.7135	4.5797	4.4518	4.3295	4.2124	4.1002	3.9927	3.8897	3.7908	3.6959	3.6048	3.5172	3.4331	3.3522
6	5.7955	5.6014	5.4172	5.2421	5.0757	4.9173	4.7665	4.6229	4.4859	4.3553	4.2305	4.1114	3.9975	3.8887	3.7845
7	6.7282	6.472	6.2303	6.0021	5.7864	5.5824	5.3893	5.2064	5.033	4.8684	4.7122	4.5638	4.4226	4.2883	4.1604
8	7.6517	7.3255	7.0197	6.7327	6.4632	6.2098	5.9713	5.7466	5.5348	5.3349	5.1461	4.9676	4.7988	4.6389	4.4873
9	8.566	8.1622	7.7861	7.4353	7.1078	6.8017	6.5152	6.2469	5.9952	5.759	5.537	5.3282	5.1317	4.9464	4.7716
10	9.4713	8.9826	8.5302	8.1109	7.7217	7.3601	7.0236	6.7101	6.4177	6.1446	5.8892	5.6502	5.4262	5.2161	5.0188
11	10.3676	9.7868	9.2526	8.7605	8.3064	7.8869	7.4987	7.139	6.8052	6.4951	6.2065	5.9377	5.6869	5.4527	5.2337
12	11.2551	10.5753	9.954	9.3851	8.8633	8.3838	7.9427	7.5361	7.1607	6.8137	6.4924	6.1944	5.9176	5.6603	5.4206
13	12.1337	11.3484	10.635	9.9856	9.3936	8.8527	8.3577	7.9038	7.4869	7.1034	6.7499	6.4235	6.1218	5.8424	5.5831
14	13.0037	12.1062	11.2961	10.5631	9.8986	9.295	8.7455	8.2442	7.7862	7.3667	6.9819	6.6282	6.3025	6.0021	5.7245
15	13.8651	12.8493	11.9379	11.1184	10.3797	9.7122	9.1079	8.5595	8.0607	7.6061	7.1909	6.8109	6.4624	6.1422	5.8474
16	14.7179	13.5777	12.5611	11.6523	10.8378	10.1059	9.4466	8.8514	8.3126	7.8237	7.3792	6.974	6.6039	6.2651	5.9542
17	15.5623	14.2919	13.1661	12.1657	11.2741	10.4773	9.7632	9.1216	8.5436	8.0216	7.5488	7.1196	6.7291	6.3729	6.0472
18	16.3983	14.992	13.7535	12.6593	11.6896	10.8276	10.0591	9.3719	8.7556	8.2014	7.7016	7.2497	6.8399	6.4674	6.128
19	17.226	15.6785	14.3238	13.1339	12.0853	11.1581	10.3356	9.6036	8.9501	8.3649	7.8393	7.3658	6.938	6.5504	6.1982
20	18.0456	16.3514	14.8775	13.5903	12.4622	11.4699	10.594	9.8181	9.1285	8.5136	7.9633	7.4694	7.0248	6.6231	6.2593
21	18.857	17.0112	15.415	14.0292	12.8212	11.7641	10.8355	10.0168	9.2922	8.6487	8.0751	7.562	7.1016	6.687	6.3125
22	19.6604	17.658	15.9369	14.4511	13.163	12.0416	11.0612	10.2007	9.4424	8.7715	8.1757	7.6446	7.1695	6.7429	6.3587
23	20.4558	18.2922	16.4436	14.8568	13.4886	12.3034	11.2722	10.3711	9.5802	8.8832	8.2664	7.7184	7.2297	6.7921	6.3988
24	21.2434	18.9139	16.9355	15.247	13.7986	12.5504	11.4693	10.5288	9.7066	8.9847	8.3481	7.7843	7.2829	6.8351	6.4338
25	22.0232	19.5235	17.4131	15.6221	14.0939	12.7834	11.6536	10.6748	9.8226	9.077	8.4217	7.8431	7.33	6.8729	6.4641
26	22.7952	20.121	17.8768	15.9828	14.3752	13.0032	11.8258	10.81	9.929	9.1609	8.4881	7.8957	7.3717	6.9061	6.4906
27	23.5596	20.7069	18.327	16.3296	14.643	13.2105	11.9867	10.9352	10.0266	9.2372	8.5478	7.9426	7.4086	6.9352	6.5135
28	24.3164	21.2813	18.7641	16.6631	14.8981	13.4062	12.1371	11.0511	10.1161	9.3066	8.6016	7.9844	7.4412	6.9607	6.5335
29	25.0658	21.8444	19.1885	16.9837	15.1411	13.5907	12.2777	11.1584	10.1983	9.3696	8.6501	8.0218	7.4701	6.983	6.5509
30	25.8077	22.3965	19.6004	17.292	15.3725	13.7648	12.409	11.2578	10.2737	9.4269	8.6938	8.0552	7.4957	7.0027	6.566