BANKING 17 APRIL 2014

Lesson Description

In this lesson we:

- Introduce and work through questions relating to:
  - Opening and closing Balance
  - Bank Charges
  - Various accounts
  - Loans from banks
  - Factor Tables
  - Interest with loans
  - Retirement Annuities.

Summary

An **OPENING** BALANCE is the amount of money owed to a bank at the beginning of a month or day. It could also be the amount of money you have in the bank at the beginning of a month or day.

A **CLOSING BALANCE** is the amount of money still owed to a bank at the end of every month or day. It could also be the amount of money you have in the bank at the end of a month or a day.

A **DEPOSIT** is an amount of money that you pay into a bank or an account, OR it could also mean the amount of money that you need to pay up front before you purchase an item on Hire Purchase (which we discussed last week).

A **LOAN** is a sum of money borrowed from a bank or a finance company. Interest is charged on this loan.

LOAN LENGTH is the period of time for which an amount of money is borrowed.

A **FACTOR** is a value indicating what the repayment of a loan would be for every R1000,00 borrowed.

INTEREST is the amount of money paid to you in return for investing your money with a bank or finance company.

MONTHLY REPAYMENT is the amount of money that needs to be paid every month on a loan.

REAL COST is the actual amount paid for something (like a house or furniture) that was bought using a loan.

Test Yourself

Question 1

In order to buy a Christmas present for his girlfriend, James takes a loan of R500,00 from an organization advertising in a local newspaper. The name of the organization is called “Sharks that Bite”. This organization charges 15% interest per month and so James has to pay back R130,00 every month.

The table below shows how James will need to repay his loan. Unfortunately, there are some figures missing.

MONTH	OPENING BALANCE	INTEREST	BALANCE WITH INTEREST	PAYMENT	CLOSING BALANCE
December	R500,00	R75,00	R575,00	R130,00	R445,00
January	R445,00	R66,75	R511,00	A	R381,75
February	B	R57,26	R439,01	R130,00	B
March	R309,01	C	R355,36	R130,00	R225,36
April	R225,36	R33,80	D	R130,00	E
May	F	G	R148,54	H	R0,00
TOTAL INTEREST PAID		I	TOTAL PAYMENT	J	

1. The value for A is:
   - A R66,75
   - B R130,00
   - C R11,00
2. The value for B is:
   - A R130,00
   - B R381,75
   - C R557,26
3. The value for C is:
   - A R130,00
   - B R46,35
   - C R55,36
4. The value for D is:
   - A R163,80
   - B R259,16
   - C R191,56
5. The value for E is:
   - A R95,36
   - B R96,20
   - C R129,16

6. The value for F is:
   - A R95,36
   - B R96,20
   - C R129,16

7. The value for G is:
   - A R14,30
   - B R14,43
   - C R19,37

8. The value for H is:
   - A R148,54
   - B R130,00
   - C R0,00

9. The value for I is:
   - A R298,53
   - B R279,16
   - C R232,81

10. The value for J is:
    - A R780,00
    - B R520,00
    - C R798,54

Improve your Skills

Question 1

R10 000 is deposited at an interest rate of 5,5% p.a., compounded monthly. The table below shows the opening balances, interest and closing balance at the end of each month for a period of 3 months as shown below:

MONTH	OPENING BALANCE	MONTHLY INTEREST	CLOSING BALANCE
1	R 10 000	R45,83	A
2	B	C	D
3	E		

Write down the missing values for:

1.1 A

1.2 B

1.3 C

1.4 D

1.5 E

Question 2

Complete the following table:

Day	Amount owing at the beginning of the day	Transaction	Balance after transaction	Interest at 0,021% per day	Balance owing at the end of the day
1	R 54.70	Deposit R2500			
2		Withdraw R500			

Question 3

Consider the table below which is used by estate agents when giving clients an idea of the repayments on a bond for a property.

Factor Table

Loan Period	Interest Rate						
	8%	9%	10%	10,25%	10,5%	10,75%	13%
5 years	20,28	20,76	21,25	21,37	21,49	21,62	22,75
15 years	9,56	10,14	10,75	10,9	11,05	11,21	12,65
20 years	8,36	9	9,65	9,82	9,98	10,15	11,71
25 years	7,72	8,39	9,09	9,26	9,44	9,62	11,28

Monthly Repayments = loan amount $\div$ 1000 $\times$ factor

The house alongside is being sold for R750 000,00. Mr Duma decides he wants to buy this house for his wife and so he goes to the bank who are prepared to give him a loan at an interest rate of 10,25% per year.

3.1 Using the table above, determine the factor that Mr Duma will use if he wants to take the loan over a period of 20 years.

3.2 How much will Mr Duma need to pay every month on his home loan?

3.3 How much will Mr Duma have paid in total after the 20 year period?

Question 4

According to the website http://www.businessesforsale.co.za ; there is a hotel in Port Elizabeth for sale at a price of R 4 750 000,00. According to the agent, one can make an average monthly profit of R45 000,00.

4.1 With the use of the table below, determine if someone wanting to buy this hotel could afford the monthly repayments (from the profit made from the hotel) on a bond if the bond was registered for the full amount of R4 750 000,00 and if the bond was taken at 8% interest over a period of 25 years.

Loan Period	Interest Rate						
	8%	9%	10%	10,25%	10,5%	10,75%	13%
5 years	20,28	20,76	21,25	21,37	21,49	21,62	22,75
15 years	9,56	10,14	10,75	10,9	11,05	11,21	12,65
20 years	8,36	9	9,65	9,82	9,98	10,15	11,71
25 years	7,72	8,39	9,09	9,26	9,44	9,62	11,28

4.2 If someone bought the hotel, what would they have paid for the hotel over the full 25 year period, using 8%.

4.3 Were the economy of South Africa to change, how much would the new owners pay on the bond every month if the interest rate were to increase to 13%, still over the 25 year period?

4.4 Calculate the total cost of the hotel if the owners are wanting to pay the hotel over 20 years, but the interest rates fluctuate as follows:

Months	Interest Rate
1 - 26	8%
27 – 67	9%
68 – 145	13%
146 – 201	10,25%
Remainder of loan period	10%