

2022 SUBJECT WORKBOOK Grade 10

a+b=c MATHEMATICAL LITERACY

A joint initiative between the Western Cape Education Department and Stellenbosch University.

Western Cape Government Education



Stellenbosch FRSITY UNIVESITH UNIVERSITEIT

forward together sonke siya phambili saam vorentoe

2022 WORKBOOK Grade M							
BROADCAST	BROADCAST SESSIONS						
GRADE 1	0 Tariff Sys	stems					
GRADE 10 Measurement							
GRADE 10 Banking, loans & investments							
Section	Data	Time	Tonic				
1	12/05/2022	15h00-16h00	Tariffs				
2	17/08/2022	15h00-16h00	Measurement				
3	18/10/2022	16600 17600	Banking, loans &				



3



investments

16h00-17h00

INTRODUCTION AND TOPICS

INTRODUCTION

Broadcast Session 1: Tariffs

- Tariffs are a commonly used form of rate.
- We often come across tariffs in our daily lives without even realizing it.
- When we know how to perform calculations with tariffs and tariff systems, we are able to make educated decisions in terms of the most cost-effective option to choose.

Broadcast Session 2: Measurement

- Understanding perimeter and area can be very helpful in your everyday life context.
- We make use of calculations of area and perimeter quite often in a variety of contexts, and use these calculations to make many decisions.
- We often need to make use of area and perimeter calculations to determine the cost of a project or building, planting or making something.
- When we are confident in performing these calculations, we can make the margin of error of not having enough materials, or over ordering something much smaller.

Broadcast Session 3: Banking, Loans & Investments

- We use different types of banking accounts for different purposes on a regular basis.
- Often when someone needs to buy something and they do not have sufficient funds, a form of a loan will be made and interest will be paid.
- In other cases where a person has some extra money and would like to invest it, interest can be earned.
- You will need to understand and be able to perform calculations with loans, investments and other banking fee structures.

Topics	Description
Tariffs	 The types of tariff system we need to be able to work with include: Municipal Tariffs (e.g: Electricity; Water; Sewage; Refuse removal) Telephone tariffs (e.g: Telkom (Landline) or cellphone (Vodacom, MTN etc) Transport tariffs (e.g: MyCiti Bus, Golden Arrow Bus, Metrorail, Gautrain, Uber, Bolt) Bank Fees (e.g transactional fees for using your account.)
Measurement	 You need to able to calculate the Perimeter & Area of the following shapes: Rectangles; Squares; Triangles; Circles (quarter, semi and three-quarter circles) You need to be able to identify the correct unit and formula for the question. You need to be able to perform calculations of cost with the answers to measurement questions.
Banking, Investments & Loans	 We hear and see adverts of different banks on a daily basis. Most South Africans have at least one type of Bank account at a specific bank that they use to transact with. We need to make sure that we understand banking, so that we can make sense of statements that we receive as well as be able to perform calculations to find out which bank offers the best fee structure for an individual or company.





2022 WORKBOOK | Grade

MATHEMATICAL LITERACY

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TERMINOLOGY

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Term	Definition				
Tariff Systems:	Tariff Systems:				
Consumption rate	The rate at which a commodity, such as water, electricity or fuel, is consumed.				
Cost Effective	Best value for money.				
Tariff	The rate charged for a service rendered, e.g. import duties, water consumption cost, etc.				
Measurement					
Area	The amount of two-dimensional space occupied by a 2-D shape. The area of a shape is the size of its surface.				
Breadth	How wide something is. From the word "broad".				
Capacity	The amount of space available to hold something. OR A measure of the volume a hollow object can hold – usually measured in litres.				
Circle	A closed cure that is everywhere the same distance from the middle point				
Circumference	Distance around a circle / the perimeter of a circle				
Conversion	A change from one system / unit to another				
Diameter	A straight line passing through the centre of a circle and touching the circle at both ends, thus dividing the circle into two equal halves.				
Perimeter	$\pi,$ the Greek letter p, the ratio of the circumference of a circle to its diameter. A constant without units, value approximately 3,142				
Radius	The distance from the centre of the circle to any point on the circumference of the circle.				
Volume	The amount of 3-D space occupied by an object. It is measured in cubic units.				





MATHEMATICAL LITERACY

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TERMINOLOGY

Term	Definition
	Banking, Loans & Investments:
Opening & Closing balance	The amount of money in the account at the beginning and the end of the period.
Debit	Amount of money paid out of an account.
Credit	Amount of money deposited into an account
Stop Order	A stop order is an instruction that you issue to your bank to make a series of future dated recurring payments
Bank charge	This covers all charges and fees made by a bank to their customers for services & transactions
Debit order	An instruction that you provide to a third party to make a series of recurring payments.
ATM	Abbreviation for automatic teller
Electronic transfer	Electronic funds transfer (EFT) is the electronic transfer of money from one bank account to another, either within a single financial institution or across multiple institutions, via computer-based systems, without the direct intervention of bank staff
Payment	This can either mean you are paying someone for goods or services, or it could also mean you are receiving a payment for goods or services delivered by you.
Interest	The amount of money that you are charged (by the lender of money, e.g. the bank) for borrowing an amount of money, over a period of time.
Credit rates	This is the interest rate that can be earned on any credit balance in a bank account. The rate will differ according to the type of account as well as the balance of the account
Debit rates	This is the interest rate that can be earned on any debit balance in a bank account, especially a credit card. The rate will differ according to the type of account as well as the balance of the account.
Branch	It is a location where the bank offers a wide array of face-to-face and automated services to its customers.
Deposit	To place money into an account
Withdrawal	to take money out of an account that belongs to you.
Savings account	A bank account that earns interest. You can use a savings account for short – term savings.
Cheque / Current account	A bank account that is used to deposit and withdraw money by visiting the bank branch, using an ATM or Internet banking or by writing a cheque. These are usually available to people who earn a regular income.
Fixed Deposit Account	This account is aimed at those who have a lump sum they want to invest over a fixed period of time (i.e. a medium or long term saving). Interest is also earned on the investment.
Credit account	An account either with a store or bank, that allows the account holder to purchase items now and pay for them later
Debit account	Debit cards can be used to pay for purchases. When it's swiped, money is deducted from the account. Credit is not available on this account.





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SESSION 1 | Tariff Systems



SUMMARY

WHAT YOU SHOULD KNOW

Tariffs are examples of rates.

How to perform calculations with tariffs.

How to read from graphs of tariff systems.

How to draw graphs of tariff systems

Tariff Structures:

 Tariffs can be billed after usage (if you get a cellphone or electricity account) or it can be paid upfront (buying prepaid electricity or cellphone airtime.)

• Tariffs can have:

- 1. a constant difference (Pay per km with uber e.g R7/km)
- 2. a fixed price (a bus ticket from civic centre to Waterfront costs R25)
- 3.free units (cellphone contract with 100 free minutes)
- 4.fixed costs (monthly contract fee for cellphone or landline rental fee).

Let's look at some examples:

(Read through these examples and try them)

- 1. A cellphone company charges R2,20 per minute. Calculate the cost of a 12 min phone call.
- 2. The rental cost of a landline is R150 per month (fixed) and the calls are charged R0,95 /min. Calculate the monthly account due if the phone was used for 165 minutes that month.
- 3. A cellphone contract offers 75 free minutes. The out of bundle rate is : R1,75 / min. Calculate the cost of calls if the total duration was 168 min.

Identify the scenario that best describes each tariff above :



SESSION 1 | Tariff Systems

WORKSHEET

TARIFF SYSTEMS	1.1
Make sure you can interpret the tariff systems.	1.2
Make sure you can answer	1.3
tariffs.	1.4 call?

Telephone / Cellphone Tariffs:

- A cellphone company has the following billing rate: 1. R1,20 / minute (billed per second), to any network during peak and off-peak times
 - What is the billing rate per second? (Remember – every minute has 60 seconds).
 - Briefly explain what is meant by "peak and off -peak times".
 - Calculate the cost of a 17minute phone call.
 - If a phone call cost R50,40, how long was the phone

Use the graph below to answer the questions that

- 1.5
- follow:



- b) Determine how long a phone call was if it costs R18.
- 1.6 If the company has a special offer where they offer the customer 60 minutes free monthly, calculate the cost of 86min

phone call.

Notes / Calculations:

SESSION 1 | Tariff Systems



WORKSHEET

TARIFF SYSTEMS

Make sure you can interpret the tariff systems.

Make sure you can answer questions about transport tariffs & Bank fees

Transport Tariffs:

2) The table below shows the fees for a train in Gauteng

	7 (da	y ti	ick	et				
(10	single ri	des betw	veen two	stations	of your ch	noice)			
Hatfield		R 189	R 234	R 360	R 423	R 450	R 477	R 513	R 477
Pretoria	R 189		R 216	R 297	R 387	R 423	R 450	R 477	R 450
Centurion	R 234	R 216		R 234	R 297	R 369	R 387	R 423	R 405
Midrand	R 360	R 297	R 234		R 216	R 234	R 270	R 297	R 279
Marlboro	R 423	R 387	R 297	R 216		R 189	R 207	R 234	R 216
Sandton	R 450	R 423	R 369	R 234	R 189		R 189	R 207	R 261
Rosebank	R 477	R 450	R 387	R 270	R 207	R 189		R 189	R 279
Park	R 513	R 477	R 423	R 297	R 234	R 207	R 189		R 297
Rhodesfield	R 477	R 450	R 405	R 279	R 216	R 261	R 279	R 297	
	Hatfield	Pretoria	Centurion	Midrand	Marlboro	Sandton	Rosebank	Park	Rhodesfie

Use the table above to answer the questions that follow.

- 2.1) Why are some of the blocks in the table shaded in grey?
- 2.2) Between which two stations is the ticket cost R 387?
- 2.3) Calculate the cost for a single ticket from Marlboro to Midrand.
- 2.4) Determine the price excluding VAT of a 7-day ticket between Sandton and Rosebank.
- 2.5) A single ticket between Midrand and Rhodesfield costs R31.

Calculate how much a person would save if she buys a 7day ticket, rather than buying a single ticket from Monday to Friday to **Bank Costs:**

3) Below is an enthactof FNB's bank fees for 2018/2019

FNB GOLD CHEQUE ACCOUNT	2018/2019 Fees
Withdrawal (Own)	R1,90 / R100
Withdrawal (other)	R9,00+ R1,90/R100
Withdrawal (POS)	R1,60

- 3.1) Calculate the cost of withdrawing R800 at "own" and "other" ATM.
- 3.2) Is there a difference in cost between withdrawing R600 and R1000 using POS?

SESSION 1 | Tariff Systems

4)



WORKSHEET

TARIFF SYSTEMS

Make sure you can interpret the tariff systems.

Make sure you can answer questions about municipal tariffs.

Municipal Tariffs (focus on electricity):

Alexa has a prepaid electricity meter at her house. Below is two images of her electricity meter before and after she purchased electricity.



4. sh	1) Determine how maine	Determine how many units of electricity she received when				
	made this purchase	made this purchase.				
4. ta	4.2) Calculate the cost in Rand of the purchase if the fo					
	system is being used	d:				
	Electricity Units (kWh)	Price per unit VAT included (c/kWh)				

0-60	Free
<60-95	144,77
<95	291,90

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SESSION 1 | Tariff Systems



WORKSHEET

TARIFF SYSTEMS

Make sure you can interpret the tariff systems.

Make sure you can answer questions about municipal tariffs.

Municipal Tariffs(focus on Water):

5) Below is a copy of the municipal account of Mr KJ Daniels.

Mr KJ Daniels	Date:	2019/03/12	
14 Sirkoon Street Kruger Park 2738	Statement for:	March 2019	

STAND SIZE	NUMBER OF DWELLINGS	DATE OF VALUATION	PORTION	MUNICIPAL VALUATION	REGION
463 m ²	1	2018/07/01	R1	Market value R944 630.00	WARD C

ACCOUNT NONIDER, 545 078	5700 00		
		SUBTOTAL (R)	TOTAL AMOUNT (R)
Water and sewer			
Reading period	2019/01/16 to 2019/02/12		
Meter reading	Start: 795 000		
	End: 807 000		
Water usage	12 kℓ (kilolitres)		
Daily average consumption	0,429 kℓ		
Charges for 12 kl are based on a sl	iding scale for a 28-day period		
Total water charge (excluding VA)	Г)	B	
Water demand management levy		22,64	
Monthly sewer charge based on sta	and size (excluding VAT)	A	
VAT: 15%		73,75	

		DUE DATE	2019/03/27
STEPPED RESI TA	DENTIAL WATER RIFF	SEWER MONTHLY CHAI STAND SIZ	RGE BASED ON E
KILOLITRES PER CONNECTION PER MONTH	2018/19 TARIFF (R/kł) EXCLUDING 15% VAT	STAND SIZE (m ²)	2018/19 TOTAL CHARGE (IN RAND) EXCLUDING 15% VAT
from 0 to 6	8,28	Up to and including 300 m ²	194,67
above 6 to 10	8,79	Larger than 300 m^2 to 1 000 m^2	378,95
above 10 to 15	15,00	Larger than 1 000 m^2 to 2 000 m^2	573,29
above 15 to 20	21,83	Larger than 2 000 m ²	836,02
		[Adapted from www.joburgwater.c	o.za and www.jotariffs.co.za

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PAYMENT DUE

Use the information above to answer the questions below:

5.1)	If the meter reading is done in liters, use this information to		
	calculate the number of liters used.		
5.2)	Use the sewer monthly charge based on stand size table to		
	determine the value of A.		
5.3)	The water tariff is called a "stepped tariff". Explain what		
this means			
	in words.		
5.4)	Use the stepped residential water tariff to calculate the		
cost of			
	12 kl of water (value B).		
5.5)	Draw a graph using the information from the stepped		

SESSION 2 | Measurement

SUMMARY

WHAT YOU SHOULD KNOW

How to calculate:

- · 1. Perimeter
- · 2. Area

Of the following shapes:

- · Rectangles
- · Squares
- · Triangles
- Circles (quarter, semi and three-quarter circles)

Identify the correct unit and formula for the question.

How to perform calculations of cost with the answers of measurement questions

Area & Perimeter:

- Understanding perimeter and area can be very helpful in everyday life context.
- We make use of calculations of area and perimeter quite often in a variety of contexts and use these calculations to make many decisions.
- We often need to make use of area and perimeter calculations to determine the cost of a project or building, planting or making something.
- When we are confident in performing these calculations, we can make the margin of error of not having enough materials, or over ordering something much smaller.

For complex shapes:

- •You will need to be able to complete calculations using more than one of the above shapes in one category.
- •Always try and identify the shapes a complex diagram is made up of.

•Formulas that will be provided to you



SESSION 2 | Measurement

SUMMARY

WHAT YOU SHOULD KNOW

How to calculate:

- · 1. Perimeter
- · 2. Area

Of the following shapes:

- Rectangles
- Squares
- Triangles
- Circles (quarter, semi and three-quarter circles)

Identify the correct unit and formula for the question.

How to perform calculations of cost with the answers of measurement questions

•	Area	&	Perimeter:
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For circles we also need to be able to solve the following:

Shape:	Circumference:	Area:
Full circle	2πr	$\pi imes r^2$
Quarter circle	$\frac{1}{4}(2\pi r)+(r\times 2)$	$\frac{1}{4} imes \pi imes r^2$
Semi-Circle	$\frac{1}{2}(2\pi r) + (r \times 2)$	$\frac{1}{2} imes \pi imes r^2$
Three quarter circle	$\frac{3}{4}(2\pi r)+(r imes 2)$	$\frac{3}{4} imes \pi imes r^2$

Always read the question carefully and convert to the appropriate unit that the answer must be in, **BEFORE** starting your calculations.

> Remember to look what UNIT the answer must be in .

SESSION 2 | Measurement



WORKSHEET

MEASUREMENT

Make sure you can identify the correct formulae to use.

Make sure you can convert between the different measuring units.

Area & Perimeter:

1)
calculated

would

Thina wants to have her bathroom retiled. She

that her bathroom has an area of 12m², but that she

on



is shown below:

a+b=c

a) Why is the floor area and the area that needs to be tiled different?

b) If the tiles Thina want to use have measurements of 25 cm by 25 cm each, calculate the area of each tile in m².

- c) How many of these tiles will Thina need to retile the floor?
- d) The tiles she wants to use are sold in boxes of 15 tiles at R 147,50 per box.

Calculate the cost of buying these tiles, to retile the

2)

bathroom.

Yardan wants to help his dad to lay paving bricks in



a) Calculate the perimeter of Yardan's backyard.

b) Calculate of putting fencing around the backyard if the

fencing is sold at Rag/ml.3

Color Lara di CV----

SESSION 2 | Measurement



Area & Perimeter:

3. Tayla is feeling creative. She is going to redo her mom's garden. She drew her plan below:



The garden area is 6,5 m long and 4,5 m wide. She needs to fence the area off as she is planning on placing a circular splash pool in the middle.

For the fencing, she leaves a 40cm border on all sides.

You may use the following formulae:

Perimeter=2 length +2 Width Circumference of cicrle=2π r Area of a circle= π r² Area of a rectangle=l ×w

- a) Calculate the length (in m) of fencing she will need.
- b) Calculate the area of the garden that will NOT be taken up by the splash pool.
- c) Tayla wants to plant flowers along the length of the garden (on both sides). These flowers need to be planted 25 cm apart to provide sufficient growing space. How many flowers will she need?
- d) Tayla's friend calculated that the diameter of the pool is 5 m. Verify through calculation if this is correct.

WORKSHEET

MEASUREMENT

Make sure you can identify the correct formulae to use.

Make sure you can convert between the different measuring units.

SESSION 2 | Measurement



WORKSHEET

MEASUREMENT

Make sure you can identify the correct formulae to use.

Make sure you can convert between the different measuring units.

Area & Perimeter:

4. Your school is planning for the athletics day in Term 4. A layout of the setup is shown in the diagram alongside.

The running track is indicated by the dotted line surrounding the shotput and long jump. The circumference of the running track is 400 m.



- a) Wade is the school 1 200 m champion. How many times does he run around the track each race?
- b) To mark the shotput pitch, it will be painted white. Every 500 ml of paint can cover 1m2 and it costs R 59/ℓ tin.

Calculate the cost of painting the pitch. You may use the formula: $A=\pi r^2$

c) The long jump pit has a 1 m jumping platform before the sandpit. The remainder of the pit will be filled with sand. Calculate the area of the space to be filled with sand.

You may use the formula: Area=Length ×Width

a+b=a

SESSION 3 | Banking, loans & investments

SUMMARY

WHAT YOU SHOULD KNOW

Know the different types of ban accounts

Interpret banking documents (like bank statement and fee brochures) by understanding and knowing how to perform calculations.

Determine bank charges for different types of accounts using given fee tables and formulae

Draw graphs from given bank charge formulae to represent bank charges for different transaction amounts on different types of accounts

- We hear and see adverts of different banks on a daily basis.
- We also see ATM's and bank branches a lot in malls, and other places.
- Most South Africans have at least one type of Bank account at a specific bank that they use to transact with.
- In grade 10 the examples we discussed will be limited to household and personal finance.
- We need to make sure that we understand banking, so that we can make sense of statements that we receive as well as be able to perform calculations to find out which bank offers the best fee structure for an individual or company.

Examples of Banking Documents: Bank Statements:

A bank statement is usually sent to the account holder monthly. Bank statements show the following for each transaction:

- the date of the transaction
- a description of the transaction, showing the type of transaction the amount of the transaction, indicating whether it is a debit or credit (often in different columns)
- a column for the balance after each transaction.

Let's look at an example:

EXAMPLE 1:

Below is an extract of Tyreeq's bank statement for April 2020

Date:	Description:	Amount:	Amount:	Balance:
1/4/2020	Pocket Money	R 500		R855
3/4/2020	ATM: withdrawal CASH		R200	R655
9/4/2020	Electronic purchase: Airtime		R110	???
20/4	Wages: Restaurant	R 325		R 1 090
23/4	Purchase: MCdonalds		R75	R 1 0 15
30/4	Bank charges: April		???	R 972,50

Questions on Example 1:

1.1) Which of the columns indicate the debit amount and which indicate the credit amount? Explain why you chose the specific columns.

- 1.2) If Tyreeq received R500 pocket money on 1 April 2020, what was his balance at the start of the month? (His opening balance).
- 1.3) How much did Tyreeq spend on McDonalds? And when did he get it?
- 1.4) Calculate the missing value for his balance on 9 April.

1.5) Calculate he missing value for the amount of money he was charged for

bank charges.

1.6) What is the geodoing balance of Tyreeq's bank account for April 2020?

a+b=a

SESSION 3 | Banking, loans & investments

SUMMARY

WHAT YOU SHOULD KNOW

Know the different types of ban accounts

Interpret banking documents (like bank statement and fee brochures) by understanding and knowing how to perform calculations.

Determine bank charges for different types of accounts using given fee tables and formulae

Draw graphs from given bank charge formulae to represent bank charges for different transaction amounts on different types of accounts

Bank fee charges:

- Banks normally charge you fees for any services they provide. If you look at a brochure for bank fees you will see that many of them have a monthly fee that needs to be paid (fixed amount) to keep the account open.
- Some banks also charge transaction fees for individual transactions (like depositing or withdrawing money).
- Some banks offer free transactions on some accounts (like 4 free withdrawals a month, or unlimited "swiping" of a card to make purchases.)
- Every bank, uses a different fee structure for different accounts and it is important for the account holder to familiarize themselves with the fee

structure to keep their monthly bank charges as low as possible.

EXAMPLE 2:

Below is an extract of the bank charges & transaction fees for B- Bank :

Transaction:	Fee:
Monthly Account Charge	R55
Deposits:	
Cash deposit at the ATM	R1,50 + R2,00/ R100
Cash deposit at a branch	R20 + 3,5 % of transaction value
counter	
Cash Withdrawals:	
At B-Bank ATM	R2,00 per R100
At other Bank's ATM	R11,50 + R2,00/R100
At POS (or purchases)	R2,00
Balance enquiries:	
On internet Banking	FREE
At B- Bank ATM	FREE
At other Bank's ATM	R4,50

Use the bank fee structure above to answer the questions that follow:

- 2.1. How much would a customer at B bank pay to do a balance enquiry at ABC Bank? (remember to look at what bank the fees are for).
- 2.2. Where would you suggest a client at B-bank does a balance enquiry?

2.3. How much would you pay to withdraw R500 at

a) B-Bank ATM

b) Another Bank's ATM

c) POS

2.4. How much more would you pay to deposit R3 000 at the branch counter than at the ATM?

SESSION 3 | Banking, loans & investments 1.) Look at Khosi's bank statement below and answer the questions that follow:



WORKSHEET

Banking, loans & investments

In this activity we will focus on banking documents (statements)

Account Holder: Khosi Cole			Statement date:		2 September 2020
Acc no:	57193205467	Frequency:		Monthly	
Acc Type:	Debit		State	ment period:	From: 1 Aug 2020 To: 31 Aug 2020
Date:	Description	Debit(F	२)	Credit: (R)	Balance(R)
1/8	1.1				14 000
3/8	POS: Pick n Pay	235,65			1.2
15/8	Sales commission			7 852	21 616,35
16/8	Car Payment	1.3	3		18 161,35
16/8	Airtime: Cell C	255			17 906,35
18/8	DisChem	392,25			17 514,10
25/8	Salary			14 500	1.4
26/8	Rent	6 500			25 514,10
31/8	Banking fees:			1.5	25 281,10
Use the ba	nlCitagitiegnentaabove	to answe	er the o	questions that fol	<i>ow:</i> 1.6
1.1	What is the description missing from the Statement on 1				
August?					
1.2	What is the balance in the account on 3 August?				
1.3	How much was the car payment on 16 August?				
1.4	Calculate the account balance on 25 August.				
1.5	For the monthly	banking	fees:		
	a) indicate whet	her it w	ill go ir	n the debit or crea	lit column
	b) determine th	e missin	g amo	unt.	
1.6	What is the closing balance on Khosi's bank account?				
1.7	What does the "	'debit" c	olumn	n mean in this case	e?
1.8	What is the account type and number?				
1.9	How often does	often does the account holder receive a statement from			
the					
	bank?	pank?			
1.10	How many times	s was mo	oney p	aid into this accou	Int in August?
	Page 18				

SESSION 3 | Banking, loans & investments



WORKSHEET Banking, loans & investments

In this activity we will focus on banking documents (statements) 2.) Look at an extract from Ben's bank statement below:

CREDIT CARD STATEMENT		Account no: 5471 7777 789 ****			
Ben Bennett 123 Avenue Cape Town			Due Date:	4/04/20	
			Minimum Due:	R 300	
			New Balance:	R1 379,90	
Ref number:	Date:	Description:	Debits	Credits & Payments	
0077623	02/03	ABC stores	108,20		
0317886	02/03	McDonalds	58,00		
7075061	10/03	Spar	159,72		
4871311	22/03	DEF store	128,00		
5887041	23/03	AAA company	109,32		
9283742	30/03	Payment thank you		40,00	
Previous balance:	-Payments	+ new charge	+ finance charge	= New Balance	
839, 62	2.1	2.2	17,04	2.3	
Credit Limit:	R 3 000	Credit available:	2.4		

Use the bank statement above to answer the questions that follow:

- 2.1 What was the total payments for March?
- 2.2 Calculate the new charge for March.
- 2.3 Calculate the new balance on the credit card account after all transactions in March.
- 2.4 Calculate the amount of credit available.
- 2.5 What was the reference number for the purchase at SPAR?
- 2.6 What is the minimum payment amount due, and when is it due?

SESSION 3 | Banking, loans & investments



WORKSHEET

Banking, loans & investments

In this activity we will focus on banking charges

3.) Below is an extract from the Bank fees for ABSA bank 2020.

Use this information to answer the questions that follow:

Pay-as-you-transact					
Monthly fees					
Prosperity monthly account fee	R50,00				
Monthly subscription fees - Online, Mobile, Telephone Banking	No charge				
Deposits					
Cheque deposit: Branch counter	R60,00				
Cash deposit: Branch counter	R60,00 + R2,00/R100				
Cash deposit: Absa ATM	R2,00 per R100				
Cardless cash deposit: Cash acceptor	R2,00 per R100				
Cash withdrawals					
Branch counter	R75,00 + R2,10/R100				
Absa ATM	R2,00 per R100				
Point of sale (POS) (Includes Purchases)	R2,00				
Absa-supported ATM	R6,00 + R2,00/R100				
Saswitch ATM	R11,50 + R2,00/R100				
Overseas ATM/POS ⁽³⁾	R75,00				
Cheque encashment	R75,00 + R2,10/R100 plus cheque issued fee				

Use the Bank fees above to calculate the total bank charges for August 2020 if the following transactions took place:

3/8 Withdraws R 500 from Branch counter

7/8 Deposits R 4 700 at ABSA ATM

13/8 Withdraws R 250 at an ABSA ATM

13/8 Buys Groceries from Checkers, uses card to pay.

15/8 Buys a take-away coffee from Mugg & Bean and uses card to pay.

17/8 Withdraws R 325 at an ABSA ATM.

23/8 Buys clothes from PEP to the value of R 277,50, uses card to pay.

a+b=0

SESSION 3 | Banking, loans & investments



WORKSHEET Banking, loans & investments

In this activity we will focus on banking charges

2) Use the information below regarding withdrawals and answer the questions that follow:



options.

3.2

Draw two separate graphs indicating the cost of the

withdrawals





Solutions to Measurement Tariffs & Tariff Systems

Question 1: 1.R1,20 \div 60 = R0,02 2.Peak time is when there is an increase in the cost of an item or services, mainly when the consumer demand is high. Off peal is normally cheaper and is when the consumer demand is lower. With cellphones, peak time is normally from 07:00-19:59. 3.17 x R1,20 = R20,40 4.R50,40 \div R1,20 = 42 min 5.A) R30 (read from graph.) B) Accept 14-16 min 6. 86-60 = 26 minutes 26 x R1,20 = R31,20	
Question 3: 1. Own: R1,90 x 8 = R15,20 Other: R9,90 + (R1,90 x 8) = R25,10 2. No, as a POS withdrawal is a fixed fee, regardless of the amount withdrawn Question 5:	Question 4: 1. 205,84-77,84 = 128 2. 128 - 60 = 68 UNITS $35 \times 144,77=5066,95 c$ 68-35 = 33 units left $33 \times 291,90 = 9632,70 c$ 5066,95 + 9632,70 = 14699,65 $14699,65 \div 100$ =R146,9965
<u></u> .	= R147

- 1. 807 000-795 000 = 12 000 liter
- 2. R378,95 (Read values of table and size of the stand)
- 3. There is a specific amount of units available per level, and every consecutive level has an increased cost.

Stepped residential water tariff:

- 4. (6 x R8,28) + (4 x R8,79) + (2 x R15) = R114 84
- 5.







Solutions to Measurement Area & Perimeter



a+b=c

Question 2:

a) 32 m b) R85 x 32 = R 2 720 Area = length x width = (9 x 5) = 45m² Area = length x width =4 x 2 = 8 m² 45m² + 8 m² = 53m²





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Solutions to Banking, Investments & Loans

Solutions, Example 1:

a) the first column indicates credit, as all transactions that increase his balance (money that gets paid into his account are here). The second column is the debit column as all transactions that decrease his account are here.

b) R855 - R500 = R355c) R75 on 23 April d) R655 - R110 = R545e) $R1\ 015 - R972,50 = R42,50$ f) R972,50

Solutions, Example 2:



Solutions Activity 1:

1.1	Opening balance	1.2	R14 000 – R235,65 = R13 764,35
1.3	R21 616,35 – R18 161,35 = R3 455	1.4	R17 514,10 + R4 500 = R32 014,10
1.5	a) debit b) R25 514,10 – R25 281,10 = R233	1.6	R25 281,10
1.7	Money that is paid out of the account	1.8	Debit 57193205467
1.9	Monthly	1.10	Twice (2)
C	1		

Solutions Activity 2:

2.1	R40	2.2	R108,20 + R 58 + R 159,72 + R 128 + R 109,32 = R563,24
2.3	R839,62 – R40 + R563,24 + R17,04 = R1 379,90	2.4	R3 000 – R1 379, 90 = R1 620,10
2.5	7075061	2.6	R300 ; 4/04/20

Solutions Activity 3:

Date:	Fee calculation:	Total payable:
	Monthly account fee	R 50
3/8		R 85,50
7/8		R 94
13/8		R 6
13/8; 15/8; 23/8		R 6
17/8		R 8
	Total Bank Fees/ Charges Pavable for August:	R249.50

