

**FURTHER EDUCATION AND TRAINING CERTIFICATE:
HAIRDRESSING:SAQA ID 65729 -LEVEL 4- 140
CREDITS**

**LEARNER WORKBOOK
SAQA: 7468
USE MATHEMATICS TO INVESTIGATE AND MONITOR THE
FINANCIAL ASPECTS OF PERSONAL, BUSINESS, NATIONAL
AND INTERNATIONAL ISSUES**

Learner Information:

Details	Please Complete this Section
Name & Surname:	
Organisation:	K & R HAIR ARTISTRY INSTITUTE
Unit/Dept:	HAIRDRESSING
Facilitator Name:	TSM DEODUTT
Date Started:	
Date of Completion:	

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OVERVIEW

About the Learner Workbook	<p>This Learner Exercise Workbook has been designed and developed to evaluate learners' level of understanding of the USE MATHEMATICS TO INVESTIGATE AND MONITOR THE FINANCIAL ASPECTS OF PERSONAL, BUSINESS, NATIONAL AND INTERNATIONAL ISSUES.</p> <p>It forms part of a series of Learner Workbooks that have been developed for FURTHER EDUCATION AND TRAINING CERTIFICATE: HAIRDRESSING:SAQA ID 65729 -LEVEL 4- 140 CREDITS</p>		
Purpose	<p>The purpose of this Learner Exercise Workbook is to evaluate learners understanding on the specific outcomes and/or assessment criteria of the following SAQA Registered Unit Standards:</p>		
US No	US Title	Level	Credits
7468	Use mathematics to investigate and monitor the financial aspects of personal, business, national and international issues	4	6
Context	<p>This assessment represents the Formative Assessment component of the USE MATHEMATICS TO INVESTIGATE AND MONITOR THE FINANCIAL ASPECTS OF PERSONAL, BUSINESS, and should be completed in the classroom/training room.</p>		
Resources	<p>The following are resources needed for this assessment:</p> <ol style="list-style-type: none"> 1. Learner Guide; and 2. Assessment Preparation. 		
Instructions to Facilitators	<p>Facilitators will be required to:</p> <ul style="list-style-type: none"> • Explain the completion of the workbook to each learner; and • Interview the learner on similar questions, should he/she not be able to write. 		

Instructions to Learners	<p>Learners will be required to:</p> <ul style="list-style-type: none"> • Complete the workbook as per the instructions; • Ensure that all questions are completed; • Ensure that the completion of the workbook is their own work; • Ensure that all annexure are attached to the workbook and clearly referred to;
Assessment Time	Learners are required to complete this assessment within the allocated time frame of.... hours.
Total Mark	This formative assessment carries a total mark of _ points . In order to meet the pass mark, learners are required to achieve a minimum of 80% of the total marks.
Equipment	<p>Learners are required to have the following equipment in order to complete this workbook:</p> <ul style="list-style-type: none"> • Pen and Pencil; • Ruler; and • Exam Pad – for additional paper.

GENERAL INFORMATION

LEARNER DETAILS		
Learner Full Names		
Learner ID No.:		
Organisation:	K & R HAIR ARTISTRY INSTITUTE	
Unit/Dept:	HAIRDRESSING	
Contact Details:	Telephone /Cell Numbers:	Email Address:
WORKSHOP DETAILS		
Workshop Venue:		
Facilitator Name:	TSM DEODUTT	
Date Started:		
Date Completed:		

ASSESSMENT PREPARATION CHECKLIST

DESCRIPTION	YES	NO	COMMENTS/CONTINGENCY
This assessment is a formative assessment and it is based on the outlined unit standard/s for the USE MATHEMATICS TO INVESTIGATE AND MONITOR THE FINANCIAL ASPECTS OF PERSONAL, BUSINESS, NATIONAL AND INTERNATIONAL ISSUES. module.			
Your assessment evidence for USE MATHEMATICS TO INVESTIGATE AND MONITOR THE FINANCIAL ASPECTS OF PERSONAL, BUSINESS, NATIONAL AND INTERNATIONAL ISSUES. module needs to be submitted on..... (day) of.....(month).....(year) at the following address/place.....			
You will be assessed based on the outlined Unit Standards. The assessment activities are linked to specific outcomes/assessment criteria of the outlined Unit Standards.			
To determine your competence level, the following are the methods to be used for this assessment: 1. 2.			
To be declared competent on USE MATHEMATICS TO INVESTIGATE AND MONITOR THE FINANCIAL ASPECTS OF PERSONAL, BUSINESS, NATIONAL AND INTERNATIONAL ISSUES. module (formative assessment), you should have obtained at least 80% of the total mark of this assessment.			
You will be provided with detailed feedback on your performance of this assessment as follows: 1. Written Feedback 2. Verbal Feedback			
Should you be declared "not yet competent" on this assessment, you will be entitled for re-assessment opportunity/ies.			
You will be required to re-submit evidence (only for areas) you were declared not yet competent. A date for re-			

submission will be agreed with the assessor.			
You will be entitled to lodge an appeal should you not be satisfied with the assessment decision of your assessment.			
You will be required to provide the assessor feedback on assessment procedure – this is to assist in improving the assessment practices.			
Your results of assessment and portfolio of evidence information will not be provided to any person without your written consent.			

Learner's Declaration

I.....herewith declare that I am ready for the assessment, that we have reviewed the assessment preparation and plan, I understand the assessment process and I am happy that the assessment will be conducted in a fair manner.

Learner Signature:	Date:	Facilitator Signature:	Date:

Learning Unit 1 Use mathematics to investigate and monitor the financial aspects of personal, business, national and international issues

UNIT STANDARD NUMBER	:	7468
LEVEL ON THE NQF	:	4
CREDITS	:	6
FIELD	:	Physical, Mathematical, Computer and Life Sciences
SUB FIELD	:	Mathematical Sciences

PURPOSE:	<p>This unit standard will be useful to people who aim to achieve recognition at some level in Further Education and Training or to meet the Fundamental requirement of a wide range of qualifications registered on the National Qualifications Framework. People credited with this unit standard are able to:</p> <ul style="list-style-type: none"> • Use mathematics to plan and control financial instruments including insurance and assurance, unit trusts, stock exchange dealings, options, futures and bonds • Use simple and compound interest to make sense of and define a variety of situations including mortgage loans, hire purchase, present values, annuities and sinking funds • Investigate various aspects of costs and revenue including marginal costs, marginal revenue and optimisation of profit • Use mathematics to debate aspects of the national and global economy, including tax, productivity and the equitable distribution of resources.
LEARNING ASSUMED TO BE IN PLACE:	
The credit value is based on the assumption that people starting to learn towards this unit standard are competent in Mathematics and Communications at NQF level 3.	



Activities

Complete the following questions as per instructions provided

Activity	Question Description	Mark
1	Using the table below answer the questions that follows	

Now let's work an example of interest. Study the information which has been given in the advertisement and the table therein, and then complete the questions which follow:

LoanLine

This handy instalment table will help you choose the best loan for your budget and circumstances. You can borrow as little as R4000 and as much as R30 000. You can decide how quickly you want to pay off your loan, from 24 months up to 5 years. LoanLine loans are flexible and allow you to plan your own finances on what you can afford.



This table is a guide only; your loan will vary according to your needs. Interest rates are subject to change in accordance with the Usury Act, but will not exceed 20% per annum for loans up to R10 000.

These instalments quoted include a monthly premium of R4, 45 per R1000 of the loan, and a monthly administration fee of R9, 50 for the optional Protection Plan.

All applications are subject to approval

Loan Amount	24 months	36 months	48 months	60 months
R 4 000	R 231	R 176	R 149	R 133
R 6 000	R 342	R 259	R 219	R 195
R 8 000	R 452	R 342	R 289	R 257
R 10 000	R 563	R 426	R 358	R 319
R 12 000	R 656	R 491	R 409	R 361
R 14 000	R 764	R 571	R 476	R 420
R 16 000	R 872	R 651	R 542	R 478
R 18 000	R 980	R 731	R 609	R 537
R 20 000	R 1 087	R 812	R 676	R 596
R 22 000	R 1 195	R 892	R 742	R 654
R 24 000	R 1 303	R 972	R 809	R 713
R 26 000	R 1 411	R 1 052	R 875	R 771
R 28 000	R 1 528	R 1 132	R 942	R 830
R 30 000	R 1 626	R 1 213	R 1 009	R 880

1. You would like to take out a loan of R8 000. How much would you have to pay back after?

- a. 24 months _____
- b. 36 months _____
- c. 48 months _____
- d. 60 months _____

Activity	Question Description	Mark
2	The following is a scenario of entrepreneurship of Poseletso. Read through the section and then answer the questions as you go along.	

1. Poseletso was given permission from the headmaster at her school to sell stationery to other learners, after school, in the school hall. Over the weekend she stocks upon blue pens, green pens, pencils, erasers, rulers and calculators. The table below shows how many of each item she purchases on average each month; complete the table by calculating the missing values in the last column:

Item	Number bought	Amount paid per item (R)	Total amount paid for items (R)
Blue pens	100	R 1, 50	

Green pens	70	R 1, 75	
Pencils	150	R 0,90	
Rulers	25	R 2,10	
Erasers	50	R 3, 70	
Calculators	25	R 89, 90	

2. What is the total amount Poseletso plans on spending per month?

3. To be able to afford this amount, she takes a loan of R3 500 from her father. Poseletso agrees to pay him back within one year with 7.5% simple interest added to the loan amount. How much money will Poseletso have to pay her father in a year's time?

4. Her sales for the first four weeks are shown in the table below:

Item	Week 1	Week 2	Week 3	Week 4
Blue pens	11	14	12	23
Green pens	5	17	10	7
Pencils	20	21	43	38
Rulers	9	13	6	22
Erasers	5	5	6	2
Calculators	1	6	5	8

List all the items that Poseletso sells and how many of each item she sells per month, on average.

5. Poseletso sells the stationery at the following unit prices:

- a. Pens R 2.00
- b. Pencils R 1.50

- c. Rulers R 3.00
- d. Erasers R 4.00
- e. Calculators R 100.00

Which of the listed items should she buy fewer of per month to increase her profit margin? Motivate your answer.

6. Calculate how much money would she have made after one month

7. Will she have made a profit after one month? Motivate your answer.

Poseletso manages her own business for two or three months and then asks Lerato, a friend of hers, to help her out. Poseletso pays Lerato R150, 00 per month for her help.

8. If the business is running for ten months of the school year, how much will Poseletso pay Lerato in that school year?

9. Calculate the total amount of money Poseletso would have spent in the ten months of the school year.

10. Calculate the amount of money Poseletso would have made in these ten months of the school year.

11. Did Poseletso make a profit at the end of the school year? Motivate your answer.

12. If Poseletso does not increase the prices of her items, but buys sufficient monthly stock for the requirements of her peers, will she make a profit or at least break even? Show all your calculations.

13. Suggest how Poseletso could have saved her business

Activity	Question Description	Mark
3	Which of these two investments will yield the highest return if R10 000 is invested at simple interest? Show your calculations.	

Deposit period (12 months)	Interest rate if the interest is paid monthly (10.2%)	Interest rate if interest is paid at the end of the period (10.65%)

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Activity	Question Description	Mark
4	<p>A small superette bakes rye bread and sells it for R12 per loaf. It costs the company R7 per loaf to produce the bread, and the company has to add an additional R1.20 in tax.</p> <p>Determine the superette's profit margin on the rye bread; correct it to one decimal place</p>	

Activity	Question Description	Mark
5	Look at the pictures below, think of numbers and describe how you can see numbers in each of them:	



SELF-ASSESSMENT

The learner must make use of the following self-evaluation checklist to rate himself against the learning outcomes of this particular training module in establishing the level of mastery of the information.

1. Not able to comply

2. Reasonable compliance (Not acceptable for final evaluation)

3. Able to comply fully

LEARNING OUTCOMES		1	2	3
1	Use mathematics to plan and control financial instruments including insurance and assurance, unit trusts, stock exchange dealings, options, futures and bonds			
2	Use simple and compound interest to make sense of and define a variety of situations including mortgage loans, hire purchase, present values, annuities and sinking funds			
3	Investigate various aspects of costs and revenue including marginal costs, marginal revenue and optimisation of profit			
4	Use mathematics to debate aspects of the national and global economy, including tax, productivity and the equitable distribution of resources.			

Learner Signature

Date

Facilitators' Signature

Date

ASSESSMENT FEEDBACK REPORT

FACILITATOR FEEDBACK & REMARKS

ASSESSMENT JUDGEMENT

Learner's Total Mark: Requirements met ☐ Requirements not met ☐

Action/s required:

By when:

LEARNER FEEDBACK & COMMENTS

DECLARATION BY THE FACILITATOR

I (Facilitator) hereby certify that I have examined the learner workbook and I am satisfied with the evidence provided by the learner.

DECLARATION BY LEARNER

I,declare that I am satisfied that the feedback given to me by the Facilitator was relevant, sufficient and done in a constructive manner. I accept the assessment judgment and have no further questions relating to this particular assessment event.

Learner	Date	Facilitator	Date

DECLARATION BY THE ASSESSOR

I (Assessor) hereby certify that I have examined the learner workbook and I am satisfied with the Facilitator Judgment of this assessment.

Assessor	Date	Moderator	Date