



higher education
& training

Department:
Higher Education and Training
REPUBLIC OF SOUTH AFRICA



Tshwane South
TVET College

"achieve the future"

SUBJECT: INTRODUCTORY ENTREPRENEURSHIP

LEVEL: N4

MODULE 3: CALCULATIONS

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After completing this module, you should be able to:

- Unit 3.1: Apply the skills you need to do the four basic calculations of addition, subtraction, multiplication and division.
- Unit 3.2: explain the concept of percentages, show that you can use a calculator and that you understand profit margin
- Unit 3.3: describe the concepts of principal, interest, final amount, term and rate.

MODULE 3: CALCULATIONS

Content

1. The four basic calculations
2. percentages
3. Interest
4. Summary of module 3
5. Summative assessment for module 3

MODULE 3: CALCULATIONS

Skills for dealing with figures and doing calculations in business

It is very important that entrepreneurs can do the basic calculations of adding, subtracting, multiplying and dividing.

Entrepreneurs need to these calculations when working out things like profits, the cost of items and their selling prices. They also need to calculate how much tax they need to pay.

Addition

Adding units or amounts of the same type

Addition refers to totaling amounts. The symbol that use for this is the plus sign(+). We can only total amounts if the units that we are adding are the same. The objective of adding is to get a total. We get this by pressing the plus sign after each number we want to add and then the equal sign(=).

MODULE 3: CALCULATIONS

Subtraction

Subtracting units or amounts of the same type

Subtraction is the opposite of adding. The symbol that we use for this is the minus sign(-). We can only subtract amounts if the units that we are subtracting are the same. The object of subtracting is to get to a total. We get this by pressing the equal sign(=).

MODULE 3: CALCULATIONS

Multiplication

Multiplying two numbers or amounts of the same type

We multiply when we want to get a final amount for a quantity or number we repeat a number of times. We multiply with the multiplication sign(\times) on the calculator. Instead of adding $R15+R15+R15$ to get R45, we multiply R15 by 3 to get R45 ($R15 \times 3 = R45$). We distinguish between commutative, associative and distributive multiplication.

Division

Dividing one number by another

We divide (\div) when we want to calculate the number of times one number is contained within another. Division is the opposite of multiplication. The $=$ gives us the result.

MODULE 3: CALCULATIONS

Percentage

A percentage is a number we express as a fraction of 100. we show it by using the percentage sign (%). In other words, 45 as a fraction of 100 of 100 is $45 \div 100$, or 0.45. to covert 0.45 to a percentage, we multiply 0.45 by 100 to get 45%.

MODULE 3: CALCULATIONS

- **Principal amount**

The principal is the amount of money people borrow or the money they invest. It is the original amount. For example, if Lohandi borrowed R1 000 to buy a new set of plates, or invested R1 000 in a savings account at the bank, the R1 000 is the principal amount.

- **Interest**

These is the amount that people need to pay when they borrow money or the interest they earn when they invest money. This is normally a certain percentage per annum. For example, if Lohandi borrowed R1 000, or invested R1 000, at 10% per annum, the interest she would have to pay, or the interest she would earn, would be R100 in the year (10% of R1 000 = R100)

MODULE 3: CALCULATIONS

- **Final amount**

This is the total amount, or the original principal plus the interest. In other words Lohandi would have to pay back R1 100, or would receive R1 100, at the end of the year on the R1 000 she borrowed or invested at 10%.

- **Term**

The term is the period in which people need to pay back the money they borrow (repayment period). The longer the term, the higher the final amount will because people must pay back the interest before they pay back the capital amount. For example, people can pay back a mortgage over a maximum period of 30 years however, the is usually 20 years

MODULE 3: CALCULATIONS

- **Rate**

We express the rate as a percentage. This is the amount that people need to pay a money they borrow or that they will earn on money they invest. For example the rate at which a person borrowed R20 000 could be 10% per annum (or per year