		Unit ID: 2109
Domain	**WHOLESALE AND RETAIL**	
Title:	**Work with a range of patterns and functions and solve problems**	
Level: 2		**Credits: 5**

Purpose

T This unit standard is intended for those who work with a range of patterns and functions and solve problems. People credited with this unit standard are able to convert between and within various representations of functions, compare, analyse and describe the behaviour of patterns and functions and represent situations mathematically in order to interpret and solve problems.

This unit standard is intended for people who carry out work in the wholesale and retail operations.

Special Notes

1. Entry information:

   Prerequisite:

   None

2. This unit standard is to be delivered and assessed in the context of Wholesale & Retail operations and should be assessed in conjunction with other relevant technical unit standards selected from this domain.

3. Assessment evidence may be collected from a real workplace, or simulated real workplace in which wholesale and retail operations are carried out.

4. Regulations and legislation relevant to this unit standard include the following:
   - Labour Act, No. 11 of 2007
   - Occupational Health and Safety Regulations relating to employees at work schedule 1(1) Act 11 of 2007, Regulation No. 156, 1992)

Quality Assurance Requirements

This unit standard and others within this subfield may be awarded by institutions which meet the accreditation requirements set by the Namibia Qualifications Authority and the Namibia Training Authority and which comply with the national assessment and moderation requirements. Details of specific accreditation requirements and the national assessment arrangements are available from the Namibia Qualifications Authority and the Namibia Training Authority on www.nta.com.na.

Elements and Performance Criteria

Element 1: Convert between and within various representations of functions

Performance Criteria

1.1 Information is selected to convert between and within various representations of functions.

1.2 Representations are selected for specific applications.

1.3 Conversions representing the functions are selected.

Element 2: Compare, analyse and describe the behaviour of patterns and functions

Performance Criteria

2.1 Patterns and functions are compared in terms of:

2.1.1 Shape and symmetry

2.1.2 Finding function values

2.1.3 Finding input values

2.1.4 The average rate of change of function values

2.2 Key features of the graphs of functions are described and interpreted.

2.3 Behaviour of functions is described as determined from graphical representations.

2.4 Patterns and functions are analysed.

Element 3: Represent situations mathematically in order to interpret and solve problems

Performance Criteria

2.1 Point-by-point plotting is used to model contextual problems.

2.2 Symbolic representations are used to model contextual problems.

2.3 Representations are analysed and manipulated to solve problems.

2.4 Representations are verified in terms of available data.

2.5 Results are interpreted in terms of the situation.

2.6 Interpretations and predictions based on the properties of the mathematical model are used.

Registration Data

Subfield:	Mathematical Sciences
Date first registered:	14 March 2019
Date this version registered:	14 March 2019
Anticipated review:	2024
Body responsible for review:	Namibia Training Authority