

PRODUCTION WORKPLACE CALCULATIONS

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| Duration: | 4 days |
| Target: | Operator level and below |
| Prerequisite: | Basic Literacy and Numeracy [ABET 4] |
| NQF Info: | NQF Level 2 |
| Qualification: | Towards the National Certificate in Production Technology NQF Level 2 |
| Credits: | 13 |
| Certification: | merSETA-accredited Plastics SA Certification |

Unit Standards

- Measure, estimate and calculate physical quantities and explore, describe and represent geometrical relationships in 2-dimensions in different life or workplace contexts (12444)
- Demonstrate understanding of rational and irrational numbers and number systems [7480]
- Work with a range of patterns and functions and solve problems (9007)
- Use mathematics to investigate and monitor the financial aspects of personal and community life (7469)

Objective of Learning Programme

To know the properties of geometric shapes, natural forms, cultural products and processes as representations of shape, space and time. Also real and abstract problems by the understanding of numbers. Understand a range of patterns and functions, and know how to monitor financial aspects.

Outcomes

At the end of the learning programme, learners will be able to

- Convert flexibly between and within various representation of function
- Compare, analyse and describe the behaviour of patterns and functions
- Represent situations mathematically in order to interpret and solve problems
- Estimate, measure and calculate physical quantities to solve problems in practical situations
- Explore transformations of two dimensional geometric figures
- Use and analyse computational tools and strategies, and make estimates and approximations
- Demonstrate understanding of numbers and relationships among numbers and number systems
- Use mathematics to plan and control personal and/or household budgets and income and expenditure
- Use simple and compound interest to make sense of and define a variety of situations

Contents

- Rational and irrational numbers
- Measurements, scientific notation and ratio
- Geometric shapes in relation to volume and area, symmetry, translation, reflection, rotation and transformation
- Patterns
- Plan/control personal and other small budgets
- Simple and compound interest

Assessment and Certification

- Workplace Experience Assignments to be submitted within two weeks following training. A Plastics|SA Certificate of Competence is issued to successful candidates.
- Relevant credits may be awarded to successful learners upon merSETA due approval process.