



Australian Government

Department of Education, Employment and Workplace Relations

TLIE507C Carry out basic workplace calculations

Release: 1

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Modification History

Not applicable.

Unit Descriptor

This unit involves the skills and knowledge required to carry out basic routine workplace calculations, including carrying out required mathematical operations, preparing basic estimates of mass, size and volume, and interpreting basic graphical representations of mathematical information. It includes calculations for routine industry-related tasks using manual and electronic processes. It specifically includes the skills and knowledge needed to estimate/calculate manual load shifting requirements.

Application of the Unit

Calculations are carried out as an integral part of routine work in the context of the workplace concerned.

Work is performed under some supervision, generally within a team environment.

Work involves the application of established mathematical principles and techniques in day-to-day work activities.

Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Not applicable.

Employability Skills Information

The required outcomes described in this unit of competency contain applicable facets of Employability Skills. The Employability Skills Summary of the qualification in which this competency is packaged will assist in identifying employability skill requirements.

Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.

Performance criteria describe the required performance needed to demonstrate achievement of the element. Assessment of performance is to be consistent with the evidence guide.

Elements and Performance Criteria

Elements and Performance Criteria

Element	Performance Criteria
1 Carry out calculations	1.1 Items are counted singly and in batches and sorted numerically, as required in workplace tasks 1.2 Calculations needed to complete work tasks are performed using the four basic processes of addition, subtraction, multiplication and division 1.3 Calculations involving fractions, percentages and mixed numbers, and using the four basic processes, are performed as required to complete workplace tasks 1.4 The functions of a calculator, numeric keypad or computer are used to perform workplace tasks 1.5 Numerical information is self-checked and corrected for accuracy
2 Prepare estimates	2.1 Quantities of materials and resources required to complete a work task are estimated 2.2 The time needed to complete a work activity is estimated 2.3 Accurate estimates for work completion are made
3 Interpret graphical representations of mathematical information	3.1 Information represented in symbols, diagrams and pictorial representations is recognised, interpreted and acted upon in workplace tasks

Required Skills and Knowledge

REQUIRED KNOWLEDGE AND SKILLS

This describes the essential knowledge and skills and their level required for this unit.

Required knowledge:

Relevant procedures and duty of care requirements

Relevant OH&S responsibilities

Basic mathematical operations and techniques

Ways of representing basic mathematical information

Procedures for identifying and using relevant workplace technology when carrying out workplace calculations

Typical mathematical problems and appropriate action and solutions

Required skills:

Communicate effectively with others when carrying out basic workplace calculations

Read and interpret instructions, procedures and information relevant to basic workplace calculations

Interpret and follow operational instructions and prioritise work

Complete documentation related to work activities

Operate electronic communication equipment to required protocol

Work collaboratively with others when carrying out basic workplace calculations

Adapt appropriately to cultural differences in the workplace, including modes of behaviour and interactions with others

Promptly report and/or rectify any identified problems that may arise when carrying out basic workplace calculations

Monitor work activities in terms of planned schedule

Modify activities depending on differing operational contingencies and environments

Work systematically with required attention to detail

Operate and adapt to differences in equipment in accordance with standard operating

procedures

Evidence Guide

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required knowledge and skills, the range statement and the assessment guidelines for this Training Package.

Critical aspects for assessment and evidence required to demonstrate competency in this unit

The evidence required to demonstrate competency in this unit must be relevant to and satisfy all of the requirements of the elements and performance criteria of this unit and include demonstration of applying:

the underpinning knowledge and skills

relevant legislation and workplace procedures

other relevant aspects of the range statement

Context of and specific resources for assessment

Performance is demonstrated consistently over a period of time and in a suitable range of contexts

Resources for assessment include:

a range of relevant exercises, case studies and other simulated practical and knowledge assessment, and/or

access to an appropriate range of relevant operational situations in the workplace

In both real and simulated environments, access is required to:

relevant and appropriate materials and/or equipment, and/or

applicable documentation including workplace procedures, regulations, codes of practice and operation manuals

Method of assessment

Assessment of this unit must be undertaken by a registered training organisation

As a minimum, assessment of knowledge must be conducted through appropriate written/oral tests

Practical assessment must occur:

through appropriately simulated activities at

the registered training organisation, and/or
in an appropriate range of situations in the
workplace

Range Statement

RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance.

Calculations will be those involved in:	basic routine work functions may occur by day or night and in a variety of work contexts
Calculations may involve:	money volume weight time length and distance area perimeter
Mathematical operations may include:	multiplication division addition subtraction percentages fractions
Consultative processes may include:	staff members management union representatives industrial relations, Occupational Health and Safety specialists other professional or technical staff
Depending on the type of organisation concerned and the local terminology used, workplace procedures may include:	company procedures enterprise procedures organisational procedures established procedures
Calculations may involve the basic use of a range of technology including:	manual techniques calculator

	computer
Information/documentation may include:	workplace procedures, checklists and instructions goods identification numbers and codes manifests, bar codes, goods and container identification manufacturers specifications workplace policies supplier and/or client instructions material safety data sheets relevant codes of practice including the national standards for manual handling and the industry safety code award, enterprise bargaining agreement, other industrial arrangements standards and certification requirements quality assurance procedures
Applicable regulations and legislation may include:	relevant regulations, standards and codes of practice, including the national standards for manual handling and industry safety codes dangerous goods and freight regulations and codes relevant Australian and state/territory OH&S legislation

Unit Sector(s)

Not applicable.

Competency Field

E - Communication and Calculation