



Australian Government

Department of Education, Employment and Workplace Relations

TDTE597B Carry out basic workplace calculations

Release: 1

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Modification History

Not applicable.

Unit Descriptor

Field E Communication and calculation

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.

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Application of the Unit

Not applicable.

Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Not applicable.

Employability Skills Information

Not applicable.

Elements and Performance Criteria Pre-Content

Not applicable.

Elements and Performance Criteria

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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

Not applicable.

Evidence Guide

Critical aspects of evidence to be considered

- a. Assessment must confirm appropriate knowledge and skills to:
 - a.1. select appropriate mathematical processes for workplace tasks
 - a.2. select and use appropriate electronic and mechanical aids including calculators and computers
 - a.3. carry out calculations
 - a.4. prepare estimates
 - a.5. interpret graphical representations of mathematical information

Interdependent assessment of units

- a. This unit of competency may be assessed in conjunction with other units that form part of a worker's job function

Required knowledge and skills

- a. Relevant procedures and duty of care requirements
- b. Relevant OHS responsibilities
- c. Basic mathematical operations and techniques
- d. Ways of representing basic mathematical information
- e. Procedures for identifying and using relevant workplace technology when carrying out workplace calculations
- f. Typical mathematical problems and appropriate action and solutions
- g. Ability to carry out the four basic mathematical operations

Resource implications

- a. Access is required to opportunities to:
 - a.1. participate in a range of exercises, case studies and other real and simulated practical and knowledge assessments that demonstrate the skills and knowledge to carry out basic workplace calculations, and/or
 - a.2. carry out basic workplace calculations in an appropriate range of operational situations

Consistency in performance

- a. Applies underpinning knowledge and skills when:
 - a.1. selecting appropriate mathematical processes for workplace tasks
 - a.2. selecting and using appropriate electronic and mechanical aids including calculators and computers
 - a.3. carrying out calculations
 - a.4. preparing estimates
 - a.5. interpreting graphical representations of mathematical information
- b. Shows evidence of application of relevant workplace procedures including:
 - b.1. relevant regulations and codes
 - b.2. OHS regulations and hazard prevention policies and procedures
 - b.3. workplace procedures and work instructions
 - b.4. relevant guidelines relating to the use of computers and calculators
- c. Action is taken promptly to report any workplace problems in accordance with regulations and workplace procedures
- d. Performance is demonstrated consistently over a period of time and in a suitable range of contexts
- e. Work is completed systematically with required attention to detail without damage to goods, equipment or personnel

Context for assessment

- a. Assessment of this unit must be undertaken by a Registered Training Organisation:
 - a.1. As a minimum, assessment of knowledge must be conducted through appropriate oral and/or written questioning
 - a.2. Appropriate practical assessment must occur:
 - a.2.1. at the Registered Training Organisation, and/or
 - a.2.2. in an appropriate work situation

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Range Statement

General context

- a. Calculations are carried out as an integral part of routine work in the context of the workplace concerned
- b. Work is performed under some supervision, generally within a team environment
- c. Work involves the application of established mathematical principles and techniques in day-to-day work activities

Worksite environment

- a. Calculations will be those involved in basic routine work functions and may occur by day or night and in a variety of work contexts
- b. Calculations may involve:
 - b.1. money
 - b.2. volume
 - b.3. weight
 - b.4. time
 - b.5. length and distance
 - b.6. area
 - b.7. perimeter
- c. Mathematical operations may include:
 - c.1. multiplication
 - c.2. division
 - c.3. addition
 - c.4. subtraction
 - c.5. percentages
 - c.6. fractions
- d. Consultative processes may include:
 - d.1. staff members
 - d.2. management
 - d.3. union representatives
 - d.4. industrial relations, Occupational Health and Safety specialists
 - d.5. other professional or technical staff
- e. Depending on the type of organisation concerned and the local terminology used, workplace procedures may include:
 - e.1. company procedures
 - e.2. enterprise procedures
 - e.3. organisational procedures
 - e.4. established procedures
- f. Calculations may involve the basic use of a range of technology including:
 - f.1. manual techniques
 - f.2. calculator
 - f.3. computer

Sources of information/documents

- a. Information/documentation may include:
 - a.1. workplace procedures, checklists and instructions
 - a.2. goods identification numbers and codes
 - a.3. manifests, bar codes, goods and container identification
 - a.4. manufacturer's specifications

- a.5. workplace policies
- a.6. supplier and/or client instructions
- a.7. material safety data sheets
- a.8. relevant codes of practice including the national standards for manual handling and the industry safety code
- a.9. award, enterprise bargaining agreement, other industrial arrangements
- a.10. standards and certification requirements
- a.11. quality assurance procedures

Applicable regulations and legislation

- a. Applicable regulations and legislation may include:
 - a.1. relevant regulations, standards and codes of practice, including the national standards for manual handling and industry safety codes
 - a.2. dangerous goods and freight regulations and codes
 - a.3. relevant Australian and State/Territory OHS legislation

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Unit Sector(s)

Not applicable.