



Australian Government

Department of Education, Employment and Workplace Relations

ICPSU263C Perform basic industry calculations

Revision Number: 1

ICPSU263C Perform basic industry calculations

Modification History

Not applicable.

Unit Descriptor

Unit descriptor	This unit describes the performance outcomes, skills and knowledge required to perform basic trade calculations and measurements.
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Application of the Unit

Application of the unit	This unit covers basic trade calculations and measurements.
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Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Prerequisite units		

Employability Skills Information

Employability skills	This unit contains employability skills.
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Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.
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Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Calculate costs and dimensions	1.1.Additions, subtractions, multiplications and divisions of costs and dimensions are correctly calculated 1.2.Material and time costs are correctly calculated for the elements of a brief 1.3.Percentages of cost and time are correctly calculated to fulfil the requirements of a brief 1.4.Results of <i>calculations</i> are correctly recorded
2. Calculate area, density and volume	2.1.The density and/or volume of fluids and colours are correctly calculated and applied 2.2.Percentages of densities and volumes are correctly calculated to fulfil the requirements of a brief
3. Use basic measuring tools and apply results of measurement	3.1.Appropriate <i>measuring tools</i> are selected and used correctly and accurately 3.2.Measurements are correctly interpreted and used in appropriate calculations

Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

Required skills

- OHS in relation to operating machinery such as safely switching off machinery before cleaning is started
- communication of ideas and information by recording the cost of materials and time
- collecting, analysing and organising information by correctly recording the results of calculations
- planning and organising activities by selecting and using appropriate measurement tools as part of the task
- teamwork when working with others as part of the production process
- mathematical ideas and techniques by calculating weights, areas and volumes required by various tasks
- problem-solving skills by correctly calculating enlargements and reductions of shapes
- use of technology by using measuring devices and tools

Required knowledge

- quick approximations of expected answers
- expected answer and why
- use of basic measurement tools
- parallax error and how does it affect measurement
- determining acceptable tolerances in measurement

Evidence Guide

EVIDENCE GUIDE

The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Overview of assessment

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

Evidence of the ability to:

- basic measuring tools used in the printing industry, for example micrometers, scales, humidity meters, pH meters, screen angle and screen ruling gauges, dot gain scales and pantone colour matching
- demonstrate an ability to find and use information relevant to the task from a variety of information sources
- documents detailing calculations
- evidence for assessment may be gathered from assessment of the unit of competency alone or through an integrated assessment activity.

Context of and specific resources for assessment

Assessment must ensure:

- assessment may take place on the job, off the job or a combination of these. Off the job assessment must be undertaken in a closely simulated workplace environment.

Method of assessment

A range of assessment methods should be used to assess practical skills and knowledge. The following examples are appropriate for this unit:

- direct questioning combined with review of portfolios of evidence and third party workplace reports of on-the-job performance by the candidate.

Guidance information for assessment

Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended.

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. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.	
<i>Types of calculations</i> may include:	numerical calculations involved in basic arithmetic, percentages and geometry used in the printing and graphic arts industry.
<i>Measuring tools</i> may include:	basic measuring tools used in the printing industry, for example micrometers, scales, humidity meters, pH meters, screen angle and screen ruling gauges, dot gain scales and pantone colour matching.
<i>Calculating methods</i> may include:	includes approximation and formal calculations using pen and paper, calculators, computers and other calculating devices.

Unit Sector(s)

Unit sector	
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Competency field

Competency field	Support
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Co-requisite units

Co-requisite units		

