



Australian Government

**Assessment Requirements for ICTPRG442
Apply mathematical techniques for
software development**

Release: 1

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Modification History

Release	Comments
Release 1	This version first released with ICT Information and Communications Technology Training Package Version 6.0.

Performance Evidence

The candidate must demonstrate the ability to complete the tasks outlined in the elements, performance criteria and foundation skills of this unit, including evidence of the ability to:

- manipulate algebraic terms and evaluate at least three numerical expressions in software development
- solve and evaluate at least three different mathematical problems
- create at least two mathematical formulas in standard algebraic form and at least two mathematical formulas in standard computer notation
- simplify and evaluate at least two Boolean expressions and formulas
- convert two sets of numeric values between binary, decimal and hexadecimal number systems as required in software development.

Knowledge Evidence

elements, performance criteria and foundation skills of this unit, including knowledge of:

- Boolean algebra, number types, numerical and algebraic expressions, simple equations and standard computer notation that may be used to apply mathematical techniques for software development
- binary, decimal and hexadecimal number systems
- memory requirements for different number formats including binary, integer, decimal and negatives
- mathematical terms application and operations in computing
- calculation tools available
- organisational procedures impacting on applying mathematical techniques for software development.

Assessment Conditions

Skills in this unit must be demonstrated in a workplace or simulated environment where the conditions are typical of those in a working environment in this industry.

This includes access to:

- programming language, tools and licensing
- software development tools and environment
- hardware components and required software.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volume Implementation Guide is found on VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a53af4e4-b400-484e-b778-71c9e9d6aff2>