



Australian Government

FSKNUM036 Use trigonometry for work

Release: 1

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Modification History

Release	Comments
Release 1	This version first released with FSK Foundation Skills Training Package Version 2.0.

Application

This unit describes the skills and knowledge to apply and use trigonometric ratios (sine, cosine and tangent), the Sine Rule and Cosine Rule and the area of triangle formula for practical workplace tasks. It includes extracting and analysing information relevant to trigonometry, undertaking trigonometry in the workplace, and communicating the mathematical information.

An individual performing these tasks works autonomously and accesses and evaluates support from a broad range of sources as needed.

This unit applies to individuals who use, or are preparing to use, numeracy skills to complete workplace activities. This includes existing workers and individuals preparing for employment through vocational education and training. This unit should be integrated and contextualised with vocational training to support achievement of vocational competency.

This unit is aligned to, but does not fully address, the Australian Core Skills Framework (ACSF) numeracy core skill indicators .09, .10 and .11 at level 5 in the workplace and employment domain of communication.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Numeracy

Elements and Performance Criteria

Element	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Extract and analyse information relevant to trigonometry	1.1 Extract highly embedded mathematical information relevant to trigonometry from a broad range of highly complex workplace texts and tasks

Element	Performance Criteria
	1.2 Incorporate information from other sources to inform and support analysis of the extracted information, where necessary 1.3 Analyse and synthesise trigonometry information required to complete workplace task
2. Apply trigonometry to complete work related calculations	2.1 Select method of solution from an expanded range of highly developed mathematical problem solving strategies and processes to complete workplace task involving triangles 2.2 Estimate outcome of trigonometric analysis related to using specialised mathematical problem solving strategies and processes to complete workplace task 2.3 Use trigonometric ratios to calculate lengths of sides and angles of right angled triangles related to practical workplace tasks 2.4 Undertake trigonometric calculations related to non-right angled triangles 2.5 Check outcomes and critically review mathematics used and real-world implications of results using developed estimation and evaluation techniques
3. Communicate results	3.1 Use formal and specialised written mathematical representation and symbolism to document, interpret and communicate mathematical thinking, problem solving process, outcomes and implications 3.2 Use specialised mathematical and general language to discuss, explain and interpret the mathematical processes, results and implications

Foundation Skills

This section describes language, literacy, numeracy and employment skills that are essential to performance but not explicit in the performance criteria.

Skill	Description
Technology	• Uses a scientific calculator

Mapping Information

Supersedes and is equivalent to FSKNUM36 Use trigonometry for work.

Links

Companion Volume Implementation Guide is found on VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=f572fe10-a855-4986-9295-3852c771f178>