



Australian Government

FSKNUM36 Use trigonometry for work

Release: 1

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Modification History

Release	Comments
Release 1	This streamlined version first released with <i>FSK Foundation Skills Training Package version 1.0</i> .

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.

This unit applies to individuals who need numeracy skills at Australian Core Skills Framework (ACSF) level 5 to undertake a vocational training pathway or workplace tasks.

This unit is designed for integration and contextualisation with vocational units to support achievement of vocational competency.

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. Where bold italicised text is used, further information is detailed in the Range of Conditions section.</i>
1. Demonstrate knowledge of trigonometry	1.1 Identify features of triangles in workplace tasks 1.2 Identify use of trigonometry in workplace contexts 1.3 Demonstrate understanding of trigonometric ratios
2. Undertake work related calculations using trigonometry	2.1 Use problem solving strategies to undertake the task 2.2 Estimate and use trigonometric ratios to calculate lengths of sides and angles of right angled triangles related to practical

Element	Performance Criteria
	workplace tasks 2.3 Undertake trigonometric calculations related to non-right angled triangles
3. Check and communicate results	3.1 Review and check the outcomes against estimate and relate to task and context 3.2 Record the result using mathematical language and symbols appropriate for the task

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Technology		Uses a scientific calculator

Mapping Information

Not applicable

Links

Companion Volume implementation guides are found in VETNet -

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

Assessment Requirements for FSKNUM36 Use trigonometry for work

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Performance Evidence

Evidence of the ability to:

- undertake work related tasks involving
- calculating side lengths and angle sizes in right-angled triangles
- use of the Sine Rule and Cosine Rule
- use of the formula for area of a triangle.

Note: Where a specific volume and/or frequency is not specified, evidence must be provided at least once.

Knowledge Evidence

Evidence of the following knowledge must be demonstrated:

- names and properties of triangles
- trigonometric ratios of sine, cosine and tangent.

Assessment Conditions

Assessment texts and tasks reflect those typically found in the workplace.

Individuals can access a broad range of support resources.

Culturally appropriate processes and techniques suited to the language, literacy and numeracy capacity of individuals and the work being performed must be used.

Reasonable adjustments can be made to ensure equity in assessment for people with disabilities.

Assessors must satisfy NVR/AQTF assessor requirements, have a sound knowledge of the ACSF and have demonstrable expertise in the vocational contextualisation and assessment of the core skill - numeracy.

Links

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