Questions: Trigonometric identities (radians)

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A selection of questions on trigonometric identities, where angles are measured in radians.

*Before attempting these questions, it is recommended that you read* [*Guide: Trigonometric identities (radians)*](../studyguides/trigonometricidentities-radians.qmd)*.*

## Q1

Using trigonometric identities, find the values of the following expressions:

1.1. .

1.2. .

1.3. .

1.4.

1.5.

1.6.

1.7.

1.8.

## Q2

Simplify the following expressions:

2.1.

2.2

2.3.

2.4.

2.5.

2.6.

## Q3

Using trigonometric identities, answer the following questions:

3.1. What is the value of ?

3.2. What are the values of and ?

3.3. If has the value (to decimal places), what is the value of to three decimal places?

## Q4

Using trigonometric identities find **exact** values of the following:

3.1.

3.2.

3.3.

3.4.

3.5.

3.6.

[After attempting the questions above, please click this link to find the answers.](../answers/as-trigonometricidentities-radians.qmd)

## Version history and licensing

v1.0: initial version created 08/23 by Dzhemma Ruseva as part of a University of St Andrews STEP project.

* v1.1: edited 05/24 by tdhc, and split into versions for both degrees and radians.

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