Questions: Area between two curves

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Summary

A selection of questions for the study guide on the area between two curves.

*Before attempting these questions, it is highly recommended that you read [Guide: Area between two curves].*

## Q1

Calculate the area of the shaded region between the following graphs and the -axis.

1.1. *Insert figure of the graph of* *with shaded region between* *and* *bounded by the graph and the* -*axis.*

1.2. *Insert figure of the graph of* *with shaded region between* *and* *bounded by the graph and the* -*axis.*

1.3. *Insert figure of the graph of* *with shaded region between* *and* *bounded by the graph and the* -*axis.*

1.4. *Insert figure of the graph of* *with shaded region between* *and* *bounded by the graph and the* -*axis.*

1.5. *Insert figure of the graph of* *with shaded region between* *and* *bounded by the graph and the* -*axis.*

1.6. *Insert figure of the graph of* *with shaded region between* *and* *bounded by the* -*axis and the graph.*

1.7. *Insert figure of the graph of* *with shaded region between* *and* *bounded by the graph and the* -*axis.*

1.8. *Insert figure of the graph of* *with shaded region between* *and* *bounded by the* -*axis and the graph.*

1.9. *Insert figure of the graph of* *with shaded region between* *and* *bounded by the graph and the* -*axis.*

1.10. *Insert figure of the graph of* *with shaded region between* *and* *bounded by the graph and the* -*axis.*

## Q2

Calculate the area of the shaded region between the following trigonometric graphs and the -axis.

2.1. *Insert figure of the graph of* *with shaded region between* *and* *bounded by the graph and the* *-axis.*

2.2. *Insert figure of the graph of* *with shaded region between* *and* *bounded by the graph and the* *-axis.*

2.3. *Insert figure of the graph of* *with shaded region between* *and* *bounded by the graph and the* *-axis.*

2.4. *Insert figure of the graph of* *with shaded region between* *and* *bounded by the graph and the* *-axis.*

2.5. *Insert figure of the graph of* *with shaded region between* *and* *bounded by the graph and the* *-axis.*

2.6. *Insert figure of the graph of* *with shaded region between* *and* *bounded by the graph and the* *-axis.*

2.7. *Insert figure of the graph of* *with shaded region between* *and* *bounded by the graph and the* *-axis.*

2.8. *Insert figure of the graph of* *with shaded region between* *and* *bounded by the graph and the* *-axis.*

2.9. *Insert figure of the graph of* *with shaded region between* *and* *bounded by the graph and the* *-axis.*

## Q3

Calculate the area of the region enclosed by the following lines and curves.

3.1. *Insert figure of the graph of* *and* *with shaded region between* *and* *bounded above by* *and below by* *.*

3.2. *Insert figure of the graph of* *and* *with shaded region between* *and* *bounded above by* *and below by* *.*

3.3. and .

3.4. and .

3.5. and .

3.6. and .

3.7. and .

3.8. and .

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

## Version history and licensing

v1.0: initial version created 05/25 by Donald Campbell as part of a University of St Andrews VIP project.

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