

# MAS151: Civil Engineering Mathematics

Elizabeth Winstanley  
[mas-engineering@sheffield.ac.uk](mailto:mas-engineering@sheffield.ac.uk)

Friday 4th October 2019, 12noon  
Hicks Building LT1

# About the course

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- work on exercises from exercise sheets in your own time.

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**Course website**

The course website is at

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# Timetable

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# Assessment

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Past papers for the exam will be made available nearer the time.

# **Video lectures and online tests**

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You won't receive any reminders: it's your responsibility to log in twice a week and watch the videos and do the tests!

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# Problem classes

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# Exercises

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# Full-class lectures

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**Text books**



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# Calculators

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**Reading week**

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# Engagement



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- ask questions in the classes;
- work on the exercise sheets at home;
- use the discussion board for extra help.

# Syllabus, Weeks 1–4



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In Week 4 we will move on to *differentiation*.



# Activity

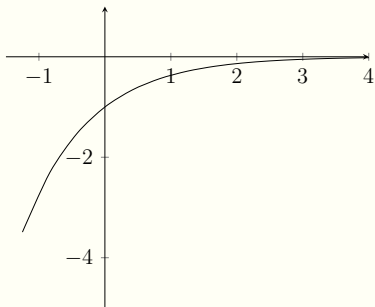
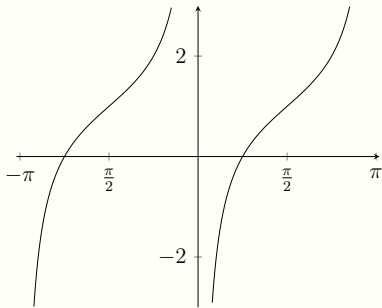
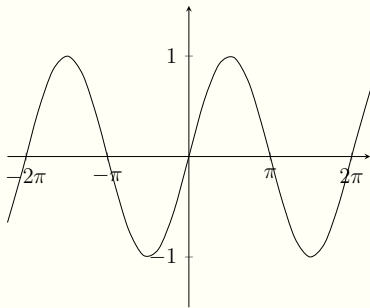
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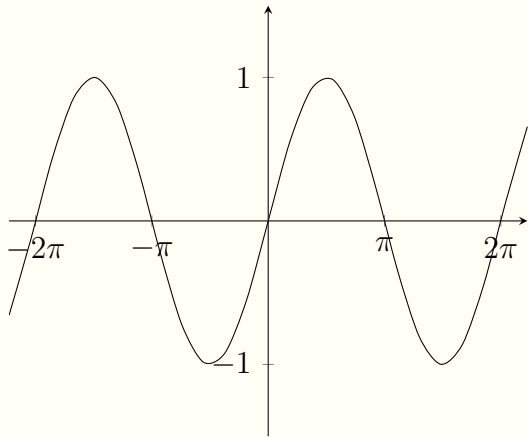
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Once you have identified the functions, discuss any understanding you have of the terms *domain*, *range*, *odd*, *even*, *periodic*, and *continuous* which appeared in the earlier slides.



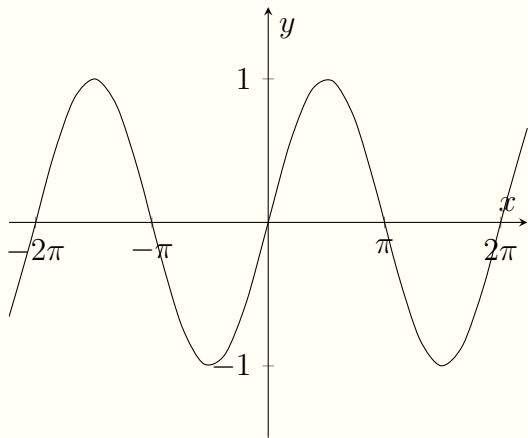
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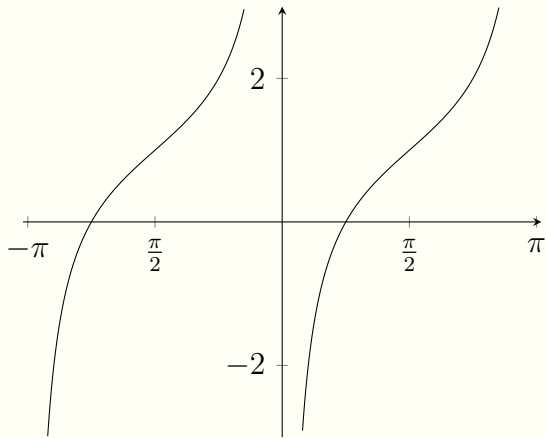
# Answers



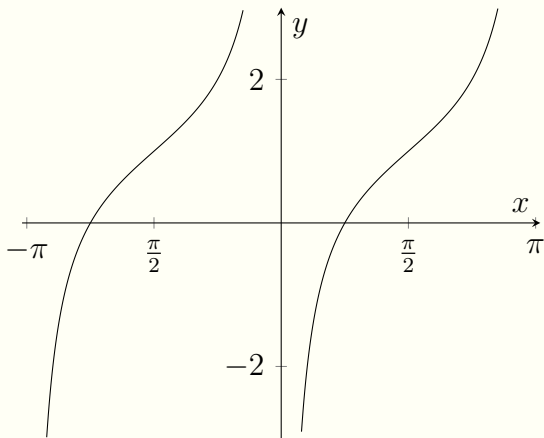


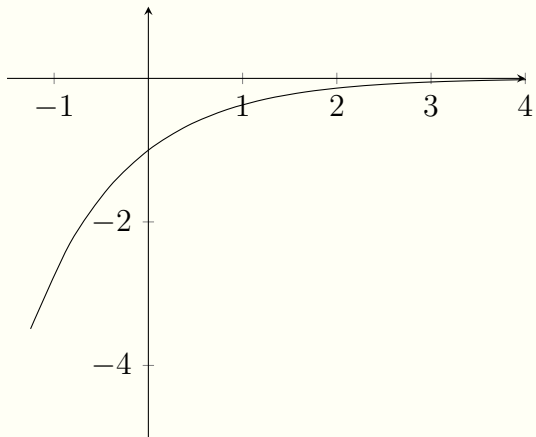
$$y = \sin x$$



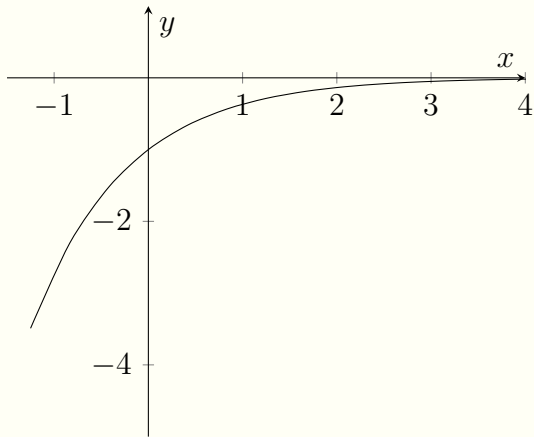


$$y = \tan\left(x - \frac{\pi}{2}\right) + 1$$





$$y = -e^{-x}$$



# Reminders

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I hope you enjoy the first few weeks of the course.