**Walton High School Hub Curriculum** 

**Year 11 HIGHER – Maths**

**Half term 5 (April 2025 – May 2025)**

How it works:

1. In the table, find the correct week by looking at the date in the first column.
2. Find today’s work – there are three links per double lesson so you won’t run out of work!
3. Choose a lesson – hold ctrl and click on the chosen link.

**If the link does not work, you do not recognise the work or the work is too difficult, try another lesson.**

1. Some lessons have links to PowerPoints and other resources beneath the video and/or Starter Quiz.
2. Complete any starter quizzes.
   1. Write your answer down
   2. Mark your answers and write down any corrections, using the videos.
3. Watch the videos and take notes.
4. Pause if/when instructed to do so to answer questions or respond.
5. When the lesson is complete, go onto the next one.

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| Week commencing | Day | Topic | Lesson 1 | Lesson 2 |
| 28/04/25 | Monday | Retrieval practice | [Find a particular value of f(x) |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-11-higher-l/units/functions-f129/lessons/find-a-particular-value-of-fx-ccwk6d/overview) | [Solve equations using f(x) = |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-11-higher-l/units/functions-f129/lessons/solve-equations-using-fx-71jk0c/overview) |
| Tuesday | [Composite functions |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-11-higher-l/units/functions-f129/lessons/composite-functions-crr30d/overview) | [Find inverse functions |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-11-higher-l/units/functions-f129/lessons/find-inverse-functions-75k68t/overview) |
| Wednesday | [Transformation of graphs (translations) |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-11-higher-l/units/other-graphs-trig-exponetial-and-transformations-331c/lessons/transformation-of-graphs-translations-6xhk0d/overview) | [Transformation of graphs (reflections) |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-11-higher-l/units/other-graphs-trig-exponetial-and-transformations-331c/lessons/transformation-of-graphs-reflections-6wt68d/overview) |
| Thursday | [Solve equations numerically: Change of sign |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-11-higher-l/units/solve-equations-numerically-iteration-cf04/lessons/solve-equations-numerically-change-of-sign-cmr30c/overview) | [Solve equations numerically: Trial and improvement |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-11-higher-l/units/solve-equations-numerically-iteration-cf04/lessons/solve-equations-numerically-trial-and-improvement-c4w34c/overview) |
| Friday | [Solve equations numerically: Rearrange to form iterative formulae |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-11-higher-l/units/solve-equations-numerically-iteration-cf04/lessons/solve-equations-numerically-rearrange-to-form-iterative-formulae-6xgp4c/overview) | [Solve equations numerically: Solving equations using iteration |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-11-higher-l/units/solve-equations-numerically-iteration-cf04/lessons/solve-equations-numerically-solving-equations-using-iteration-c5h6cr/overview) |
| 05/05/25 | Monday |  |  |
| Tuesday | [Draw and recognise circle graphs of the form x² + y² = r² |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-11-higher-l/units/circle-graphs-8e03/lessons/draw-and-recognise-circle-graphs-of-the-form-x-y-r-cguk6t/overview) | [Decide whether a point lies, on, outside or inside a circle |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-11-higher-l/units/circle-graphs-8e03/lessons/decide-whether-a-point-lies-on-outside-or-inside-a-circle-cgvk2d/overview) |
| Wednesday | [Intersection of lines and circles |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-11-higher-l/units/circle-graphs-8e03/lessons/intersection-of-lines-and-circles-c9jk0d/overview) | [Find the equation of a tangent to a circle at a given point |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-11-higher-l/units/circle-graphs-8e03/lessons/find-the-equation-of-a-tangent-to-a-circle-at-a-given-point-6tk68t/overview) |
| Thursday | [Draw graphs of simple cubic functions using a table of values. |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-11-higher-l/units/cubic-and-reciprocal-graphs-5f24/lessons/draw-graphs-of-simple-cubic-functions-using-a-table-of-values-cnk36d/overview) | [Sketch graphs of simple cubic functions, given as three linear expressions. |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-11-higher-l/units/cubic-and-reciprocal-graphs-5f24/lessons/sketch-graphs-of-simple-cubic-functions-given-as-three-linear-expressions-6ww36e/overview) |
| Friday | [Interpret graphs of simple cubic functions, including finding solutions to cubic equations |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-11-higher-l/units/cubic-and-reciprocal-graphs-5f24/lessons/interpret-graphs-of-simple-cubic-functions-including-finding-solutions-to-cubic-equations-60u6ac/overview) | [Recognise, draw, sketch and interpret graphs of the reciprocal function y = 1/x | O](https://www.thenational.academy/pupils/programmes/maths-secondary-year-11-higher-l/units/cubic-and-reciprocal-graphs-5f24/lessons/recognise-draw-sketch-and-interpret-graphs-of-the-reciprocal-function-y-1x-cct30d/overview) |
| 12/05/25 | Monday | [Know the Graphs of y=sin(x), y=cos(x) and y=tan(x) |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-11-higher-l/units/other-graphs-trig-exponetial-and-transformations-331c/lessons/know-the-graphs-of-sin-cos-and-tan-ctj68d/overview) | [Recognise, Sketch and Interpret Graphs of Exponential Functions (y=k^x) |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-11-higher-l/units/other-graphs-trig-exponetial-and-transformations-331c/lessons/recognise-sketch-and-interpret-graphs-of-exponential-functions-69hkct/overview) |
| Tuesday | [Draw a tree diagram for independent events |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-11-higher-l/units/probability-3-tree-diagrams-53c5/lessons/draw-a-tree-diagram-for-independent-events-c8v3ge/overview) | [Calculate probabilities of independent events |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-11-higher-l/units/probability-3-tree-diagrams-53c5/lessons/calculate-probabilities-of-independent-events-6mw3jr/overview) |
| Wednesday | [Draw a tree diagram for dependent events |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-11-higher-l/units/probability-3-tree-diagrams-53c5/lessons/draw-a-tree-diagram-for-dependent-events-6thpar/overview) | [Calculate probabilities of dependent events |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-11-higher-l/units/probability-3-tree-diagrams-53c5/lessons/calculate-probabilities-of-dependent-events-69k32t/overview) |
| Thursday | [Conditional probability word problems |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-11-higher-l/units/higher-probability-conditional-and-further-set-notation-f690/lessons/conditional-probability-word-problems-cgwkec/overview) | [Conditional probability from a two-way table |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-11-higher-l/units/higher-probability-conditional-and-further-set-notation-f690/lessons/conditional-probability-from-a-two-way-table-74t66t/overview) |
| Friday | [Probability from a venn diagram using further set notation (2 sets) |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-11-higher-l/units/higher-probability-conditional-and-further-set-notation-f690/lessons/probability-from-a-venn-diagram-using-further-set-notation-2-sets-6dgp8r/overview) | [Probability from a venn diagram using further set notation (3 sets) |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-11-higher-l/units/higher-probability-conditional-and-further-set-notation-f690/lessons/probability-from-a-venn-diagram-using-further-set-notation-3-sets-c5hkgr/overview) |
| 19/05/25 | Monday | [Plot a histogram |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-11-higher-l/units/histograms-5101/lessons/plot-a-histogram-60vk8e/overview) | [Find frequency from a histogram |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-11-higher-l/units/histograms-5101/lessons/find-frequency-from-a-histogram-6tk30r/overview) |
| Tuesday | [Checking and securing understanding of interpreting graphs |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-10-higher/units/simultaneous-equations-2-variables/lessons/checking-and-securing-understanding-of-interpreting-graphs/overview) | [Forming simultaneous equations |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-10-higher/units/simultaneous-equations-2-variables/lessons/forming-simultaneous-equations/overview) |
| Wednesday | [Combining equations |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-10-higher/units/simultaneous-equations-2-variables/lessons/combining-equations/overview) | [Solving algebraic simultaneous equations by elimination |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-10-higher/units/simultaneous-equations-2-variables/lessons/solving-algebraic-simultaneous-equations-by-elimination/overview) |
| Thursday | [Solving more complex simultaneous equations by elimination |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-10-higher/units/simultaneous-equations-2-variables/lessons/solving-more-complex-simultaneous-equations-by-elimination/overview) | [Solving simultaneous linear equations by substitution |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-10-higher/units/simultaneous-equations-2-variables/lessons/solving-simultaneous-linear-equations-by-substitution/overview) |
| Friday | [Solving simultaneous linear equations graphically |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-10-higher/units/simultaneous-equations-2-variables/lessons/solving-simultaneous-linear-equations-graphically/overview) | [Solving a quadratic and linear pair of simultaneous equations using elimination |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-10-higher/units/simultaneous-equations-2-variables/lessons/solving-a-quadratic-and-linear-pair-of-simultaneous-equations-using-elimination/overview) |