

## Mathematics Transition Schedule

To help you prepare for A-Level maths you need to consolidate on key concepts from year 11. We have a pack of transition worksheets that we will be setting for you to complete weekly between now and July. In preparation for starting A-Level maths you need to be completing as many of these transition worksheets as possible and getting help when you need it.

You can use the attached video links, the page references from the Edexcel GCSE Higher Mathematics revision guide or email your teachers and ask for help. These topics from the basics of A-Level maths, so having a secure grasp of these topics will really help you in your A-Level journey.

The schedule below covers the order in which we will release the worksheets and the order in which you will get the answers, and is a useful too for you to help structure your time.

<u>Week Commencing</u>	<u>Topics to cover</u>
27 <sup>th</sup> April	Expanding Brackets and Simplifying expressions
4 <sup>th</sup> May	Surds & Rules of Indices
11 <sup>th</sup> May	Factorising Expressions & Completing the Square
18 <sup>th</sup> May	Solving Quadratics & Sketching Quadratics Graphs
1 <sup>st</sup> June	Solving Linear Simultaneous Equations & Solving Linear and Quadratic Simultaneous Equations
8 <sup>th</sup> June	Solving Linear Sim. Equations Graphically & Linear Inequalities
15 <sup>th</sup> June	Quadratic Inequalities & Sketching Cubic and Reciprocal Graphs
22 <sup>nd</sup> June	Translating Graphs & Straight Line Graphs
29 <sup>th</sup> June	Parallel and Perpendicular Lines & Proportion
6 <sup>th</sup> July	Re-arranging Equations
13 <sup>th</sup> July	Trigonometry & Area under a Graph

<b>Algebraic expressions</b>	<u>Week commencing</u>	<u>Higher revision guide page reference</u>	<u>Video Links</u>
Expanding brackets and simplifying expressions	27 <sup>th</sup> April	16, 17, 47	<ul style="list-style-type: none"> <li>• <a href="https://www.mathsgenie.co.uk/expanding-and-factorising-quadratics.html">https://www.mathsgenie.co.uk/expanding-and-factorising-quadratics.html</a></li> <li>• <a href="https://www.mathsgenie.co.uk/algebraic-fractions.html">https://www.mathsgenie.co.uk/algebraic-fractions.html</a></li> </ul>
Surds	4 <sup>th</sup> May	12, 49	<ul style="list-style-type: none"> <li>• <a href="https://www.mathsgenie.co.uk/surds.html">https://www.mathsgenie.co.uk/surds.html</a></li> </ul>
Indices	4 <sup>th</sup> May	2, 3,	<ul style="list-style-type: none"> <li>• <a href="https://www.mathsgenie.co.uk/indices.html">https://www.mathsgenie.co.uk/indices.html</a></li> <li>• <a href="https://www.mathsgenie.co.uk/indices2.html">https://www.mathsgenie.co.uk/indices2.html</a></li> </ul>

<b>Quadratic functions</b>	<u>Week commencing</u>	<u>Higher revision guide page reference</u>	<u>Video Links</u>
Factorise quadratic expressions	11 <sup>th</sup> May	18	<ul style="list-style-type: none"> <li>• <a href="https://www.mathsgenie.co.uk/expanding-and-factorising-quadratics.html">https://www.mathsgenie.co.uk/expanding-and-factorising-quadratics.html</a></li> <li>• <a href="https://www.mathsgenie.co.uk/factorising-harder.html">https://www.mathsgenie.co.uk/factorising-harder.html</a></li> </ul>
Completing the square	11 <sup>th</sup> May	33	<ul style="list-style-type: none"> <li>• <a href="https://www.mathsgenie.co.uk/completing-the-square.html">https://www.mathsgenie.co.uk/completing-the-square.html</a></li> </ul>
Solving quadratic equations	18 <sup>th</sup> May	31, 32, 48	<ul style="list-style-type: none"> <li>• <a href="https://www.mathsgenie.co.uk/solving-quadratics.html">https://www.mathsgenie.co.uk/solving-quadratics.html</a></li> <li>• <a href="https://www.mathsgenie.co.uk/quadratic-formula.html">https://www.mathsgenie.co.uk/quadratic-formula.html</a></li> </ul>
Sketching quadratic graphs	18 <sup>th</sup> May	42, 43, 44	<ul style="list-style-type: none"> <li>• <a href="https://www.youtube.com/watch?v=sK5JsRbCyIE&amp;feature=youtu.be">https://www.youtube.com/watch?v=sK5JsRbCyIE&amp;feature=youtu.be</a></li> </ul>

<b>Simultaneous equations</b>	<u>Week commencing</u>	<u>Higher revision guide page reference</u>	<u>Video Links</u>
Solving linear simultaneous equations.	1 <sup>st</sup> June	34	<ul style="list-style-type: none"> <li>• <a href="https://www.mathsgenie.co.uk/simultaneous.html">https://www.mathsgenie.co.uk/simultaneous.html</a></li> </ul>
Solving linear and quadratic simultaneous equations.	1 <sup>st</sup> June	35	<ul style="list-style-type: none"> <li>• <a href="https://www.mathsgenie.co.uk/simultaneous-quadratic.html">https://www.mathsgenie.co.uk/simultaneous-quadratic.html</a></li> </ul>
Solving simultaneous equations graphically.	8 <sup>th</sup> June	41	<ul style="list-style-type: none"> <li>• <a href="https://www.mathsgenie.co.uk/simultaneous-graphically.html">https://www.mathsgenie.co.uk/simultaneous-graphically.html</a></li> </ul>

<b>Inequalities</b>	<u>Week commencing</u>	<u>Higher revision guide page reference</u>	<u>Video Links</u>
Linear inequalities.	8 <sup>th</sup> June	37	<ul style="list-style-type: none"> <li>• <a href="https://www.mathsgenie.co.uk/inequalities.html">https://www.mathsgenie.co.uk/inequalities.html</a></li> <li>• <a href="https://www.mathsgenie.co.uk/inequalities-on-graphs.html">https://www.mathsgenie.co.uk/inequalities-on-graphs.html</a></li> </ul>
Quadratic inequalities.	15 <sup>th</sup> June	38	<ul style="list-style-type: none"> <li>• <a href="https://www.mathsgenie.co.uk/quadratic-inequalities.html">https://www.mathsgenie.co.uk/quadratic-inequalities.html</a></li> </ul>

<b>Graphs and Transformations</b>	<u>Week commencing</u>	<u>Higher revision guide page reference</u>	<u>Video Links</u>
Sketching cubic and reciprocal graphs.	15 <sup>th</sup> June	28, 29	<a href="https://www.youtube.com/watch?v=QBp8Fcpn6p4&amp;feature=youtu.be">https://www.youtube.com/watch?v=QBp8Fcpn6p4&amp;feature=youtu.be</a> <a href="https://www.youtube.com/watch?v=sLYwhWn16ko&amp;feature=youtu.be">https://www.youtube.com/watch?v=sLYwhWn16ko&amp;feature=youtu.be</a>
Translating graphs.	22 <sup>nd</sup> June	40	<a href="https://www.mathsgenie.co.uk/transforming-graphs.html">https://www.mathsgenie.co.uk/transforming-graphs.html</a>

<b>Straight line graphs</b>	<u>Week commencing</u>	<u>Higher revision guide page reference</u>	<u>Video Links</u>
Straight line graphs	22 <sup>nd</sup> June	25, 26,	<ul style="list-style-type: none"> <li>• <a href="https://www.mathsgenie.co.uk/equation-of-a-line.html">https://www.mathsgenie.co.uk/equation-of-a-line.html</a></li> <li>• <a href="https://www.mathsgenie.co.uk/gradient-of-a-line.html">https://www.mathsgenie.co.uk/gradient-of-a-line.html</a></li> </ul>
Parallel and perpendicular lines	29 <sup>th</sup> June	27	<ul style="list-style-type: none"> <li>• <a href="https://www.mathsgenie.co.uk/parallel-and-perpendicular-lines.html">https://www.mathsgenie.co.uk/parallel-and-perpendicular-lines.html</a></li> </ul>
Direct and inverse proportion	29 <sup>th</sup> June	68, 69, 70.	<ul style="list-style-type: none"> <li>• <a href="https://www.mathsgenie.co.uk/direct-and-inverse-proportion.html">https://www.mathsgenie.co.uk/direct-and-inverse-proportion.html</a></li> </ul>

<b>Trigonometry</b>	<u>Week commencing</u>	<u>Higher revision guide page reference</u>	<u>Video Links</u>
Trig ratios and graphs	13 <sup>th</sup> July	39, 77, 78.	<ul style="list-style-type: none"> <li>• <a href="https://www.mathsgenie.co.uk/harder-graphs.html">https://www.mathsgenie.co.uk/harder-graphs.html</a></li> <li>• <a href="https://www.mathsgenie.co.uk/sohcahtoa.html">https://www.mathsgenie.co.uk/sohcahtoa.html</a></li> </ul>
Exact trig values	13 <sup>th</sup> July	79	<ul style="list-style-type: none"> <li>• <a href="https://www.mathsgenie.co.uk/exact-trig-values.html">https://www.mathsgenie.co.uk/exact-trig-values.html</a></li> </ul>

<b>Area under a graph and rearranging equations</b>	<u>Week commencing</u>	<u>Higher revision guide page reference</u>	<u>Video Links</u>
Estimating area under a curve.	13 <sup>th</sup> July	54, 55, 56.	<ul style="list-style-type: none"> <li>• <a href="https://www.youtube.com/watch?v=1AVtsIXytRA">https://www.youtube.com/watch?v=1AVtsIXytRA</a></li> </ul>
Rearranging equations	6 <sup>th</sup> July	46	<ul style="list-style-type: none"> <li>• <a href="https://www.mathsgenie.co.uk/changing-the-subject2.html">https://www.mathsgenie.co.uk/changing-the-subject2.html</a></li> <li>• <a href="https://www.mathsgenie.co.uk/changing-the-subject2.html">https://www.mathsgenie.co.uk/changing-the-subject2.html</a></li> </ul>