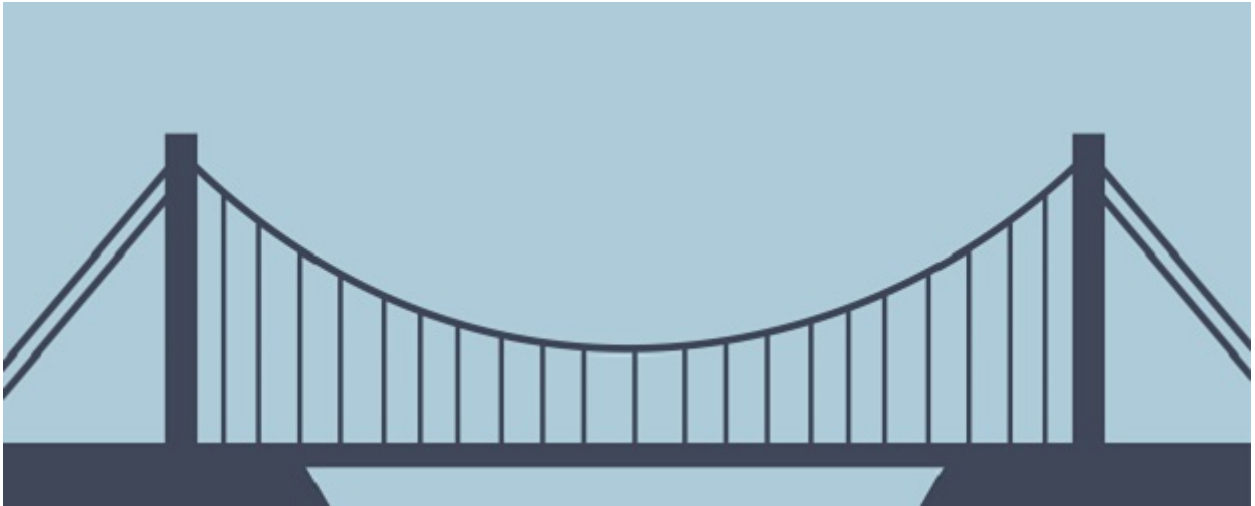# The Bridge to A level

Therapy

Therapy for Topics

All therapy references are referenced to the *PiXL Maths App* or *MyMaths*

For the *PiXL Maths App* you need to navigate to the *Therapy* videos as follows:

After logging in, select the *Design a Test* tab.

This will give you 7 tabs to choose from (Number, Algebra, Ratio & Proportion, Geometry, Probability, Statistics and Problem Solving). Select one of these; this is the *Topic*.

You will now see a menu of *Test Titles*. Select the one you need, and you will need to select the *Begin Test* button.

You need not do this test, but it will bring up the *Therapy Video* button which you now select.

This will give you the menu of Therapy video titles applicable to this test, Select the one you need.

In Summary, all therapy references are for therapy videos from the PiXL Maths App. The relevant video is found by accessing

Design a Test / Topic / Test Title / Therapy video title

The PiXL Maths App can be downloaded free from the PiXL website

http://mathsapp.pixl.org.uk/

For *MyMaths* your school needs to supply you with your login details.

The hyperlinks in this document will take you directly to the pages you will need**. (You may need to copy and paste the link into your web browser**).

Therapy for Topic 1   Quadratic equations

PiXL Therapy - [Rearranging and solving quadratics](), [Completing the square](), [Factorising](),
[Formula]()

Maths App Reference
1. Algebra / Graph transformations part a / Calculate the minimum point of a quadratic function
2. Algebra / Quadratics / Solve a quadratic by factorising where a is not 1 **and** solve a quadratic by completing the square

MyMaths Reference
https://app.mymaths.co.uk/1784-resource/quadratic-equations-1
https://app.mymaths.co.uk/192-resource/quadratic-equations-2
https://app.mymaths.co.uk/193-resource/completing-the-square
https://app.mymaths.co.uk/194-resource/quadratic-formula

Therapy for Topic 2   Algebra

Maths App Reference
1. Algebra / Harder equations and re-arranging formulae / Re-arrange a formula where the subject appears more than once

MyMaths Reference
https://app.mymaths.co.uk/175-resource/factorising-quadratics-2
https://app.mymaths.co.uk/207-resource/rearranging-2
https://app.mymaths.co.uk/176-resource/cancelling-algebraic-fractions
https://app.mymaths.co.uk/177-resource/adding-algebraic-fractions
https://app.mymaths.co.uk/178-resource/multiplying-algebraic-fractions

Therapy for Topic 3   Simultaneous equations

PiXL Therapy - [Linear](), [Non-linear]()

Maths App Reference
1. Algebra / Simultaneous equations / Solve linear and non-linear simultaneous equations

MyMaths Reference
https://app.mymaths.co.uk/198-resource/simultaneous-equations-3
https://app.mymaths.co.uk/195-resource/quadratic-simultaneous-equs

Therapy for Topic 4   Surds

PiXL Therapy - [Surds]()

Maths App Reference
1. Number / Surds / Simplify a surd
2. Number / Surds / Rationalise a denominator

3. Number / Surds / Operate with surds

MyMaths Reference
https://app.mymaths.co.uk/599-resource/surds-part-1
https://app.mymaths.co.uk/600-resource/surds-part-2

Therapy for Topic 5   Indices

PiXL Therapy - Negative and fractional index laws

Maths App Reference
1. Number / Indices / Evaluate positive, negative and fractional indices

MyMaths Reference
https://app.mymaths.co.uk/597-resource/indices-part-2
https://app.mymaths.co.uk/598-resource/indices-part-3

Therapy for Topic 6   Properties of lines

MyMaths Reference
https://app.mymaths.co.uk/559-resource/equation-of-a-line
https://app.mymaths.co.uk/3270-resource/equation-of-a-line-3

Therapy for Topic 7   Sketching curves

PiXL Therapy - Turning points and completing the square

MyMaths Reference
https://app.mymaths.co.uk/226-resource/sketching-quadratic-graphs-2
https://app.mymaths.co.uk/3266-resource/sketching-cubic-graphs
https://app.mymaths.co.uk/588-resource/sketching-polynomials

Therapy for Topic 8   Transformation of functions

PiXL Therapy - Translate a function

Maths App Reference
1. Algebra/ Graph transformations part a / Recognise the shape of quadratic graph transformations
2. Algebra / Graph transformations part a / Calculate the minimum point of a quadratic function
3. Algebra / Graph transformations part b / Recognise trigonometric graph transformations
4. Algebra / Graph transformations part b / Interpret values from a transformed trigonometric graph

MyMaths Reference
https://app.mymaths.co.uk/585-resource/transforming-graphs

https://app.mymaths.co.uk/3265-resource/transforming-graphs-1
https://app.mymaths.co.uk/229-resource/transforming-graphs-2

Therapy for Topic 9 Pythagoras' Theorem and Trigonometric ratios

Maths App Reference
1. Geometry / Trigonometry / Calculate an unknown angle or side using SOH CAH TOA
2. Geometry / Trigonometry / Apply Pythagoras' Theorem and SOH CAH TOA in 3D contexts
3. Geometry / Pythagoras' Theorem / Calculate the length of a line in 2D or 3D problems **and** Calculate the length of a line using Pythagoras from coordinates

MyMaths Reference
https://app.mymaths.co.uk/300-resource/pythagoras-theorem
https://app.mymaths.co.uk/301-resource/pythagoras-3d
https://app.mymaths.co.uk/321-resource/trig-missing-angles
https://app.mymaths.co.uk/322-resource/trig-missing-sides
https://app.mymaths.co.uk/328-resource/3d-trigonometry

Therapy for Topic 10   Sine / Cosine Rule

PiXL Therapy - Cosine rule, Sine rule

Maths App Reference
1. Geometry / Sine and Cosine Rules / Apply the sine and cosine rules to calculate a length or an angle
2. Geometry / Sine and Cosine Rules / Calculate the area of non-right angled triangles and of a segment.

MyMaths Reference
https://app.mymaths.co.uk/325-resource/cosine-rule-sides
https://app.mymaths.co.uk/326-resource/cosine-rule-angles
https://app.mymaths.co.uk/324-resource/sine-rule
https://app.mymaths.co.uk/327-resource/trig-area-of-a-triangle

Therapy for Topic 11   Inequalities

PiXL Therapy - Quadratic inequalities

Maths App Reference
1. Algebra / Inequalities / Solve inequalities
MyMaths Reference
https://app.mymaths.co.uk/232-resource/inequations
https://app.mymaths.co.uk/235-resource/quadratic-inequalities

Therapy for Topic 12   Algebraic Proof

PiXL Therapy - Proof

MyMaths Reference
https://app.mymaths.co.uk/1781-resource/identities
https://app.mymaths.co.uk/1777-resource/proof

Therapy for Topic 13   Vectors

PiXL Therapy - Vectors

Maths App Reference
1. Geometry / Vectors / Construct a resultant vector from a diagram
2. Geometry / Vectors / Recognise when 3 or more points are collinear
3. Geometry / Vectors / Perform vector arithmetic

MyMaths Reference
https://app.mymaths.co.uk/332-resource/vectors-1
https://app.mymaths.co.uk/333-resource/vectors-2

Therapy for Topic 14   Probability

PiXL Therapy - Conditional probability

Maths App Reference
1. Probability / Dependent events / Calculate probabilities from tree diagrams using AND / OR statements
2. Probability / Venn diagrams – part b / Calculate probability from Venn diagrams and set notation

MyMaths Reference
https://app.mymaths.co.uk/1730-resource/venn-diagrams-2
https://app.mymaths.co.uk/381-resource/probability-revision
https://app.mymaths.co.uk/382-resource/the-or-rule
https://app.mymaths.co.uk/383-resource/independent-probability

Therapy for Topic 15   Statistics: Averages and Graphs

PiXL Therapy - Histograms

Maths App Reference
1. Statistics / Histogram tables / Calculating the frequency density
2. Statistics / Interpreting histograms / Calculating the frequency from a histogram

3. Statistics / Averages from a frequency table / Calculate the mean from a grouped frequency table
4. Statistics / Frequency polygon graphs / Interpret values from a frequency polygon graph
5. Statistics / Cumulative frequency graphs / Interpret a cumulative frequency diagram
6. Statistics / Boxplots / Interpret a boxplot

MyMaths Reference
https://app.mymaths.co.uk/365-resource/histograms
https://app.mymaths.co.uk/1739-resource/frequency-polygons
https://app.mymaths.co.uk/362-resource/cumulative-frequency-1
https://app.mymaths.co.uk/363-resource/cumulative-frequency-2
https://app.mymaths.co.uk/364-resource/box-and-whisker-plots