| HIGHER TIER - AQA |  |  |  |
| :---: | :---: | :---: | :---: |
| Paper 1 | Paper 2 | Paper 3 |  |

Number (*see Ratio - some overlap of topic areas)

| Arithmetic | Negative numbers |  |  |
| :---: | :---: | :---: | :---: |
| Fractions | Arithmetic |  |  |
|  |  |  | Fraction of a number |
|  | Fraction to decimal |  |  |
| Properties |  |  | Bounds |
|  |  | Cube root problem |  |
|  |  | Highest common factor problem |  |
|  |  |  | Inequality |
|  |  |  | Power |
|  |  |  | Significant figures |
|  | Square root, power |  |  |
| Decimals | Decimal to fraction |  |  |
|  | Recurring |  |  |
|  | Recurring to fraction |  |  |
| Indices | Fractional |  |  |
|  | Laws of indices |  |  |
|  | Negative |  |  |
| Standard Form |  | Calculation |  |
|  |  |  | Conversion |
| Surds | Rationalise denominator |  |  |
|  | Simplification |  |  |
| Other |  | Product rule for counting |  |
|  |  | Use of calculator |  |

Algebra

| Equations |  |  | Circle |
| :---: | :---: | :---: | :---: |
|  | Identity |  |  |
|  | Linear | Linear |  |
|  | Number line |  |  |
|  |  | Quadratic |  |
|  | Quadratic inequality |  |  |
|  | Quadratic problem |  |  |
|  |  | Set up and solve | Set up and solve |
| Manipulation |  | Change subject | Change subject |
|  |  | Difference of two squares |  |
|  |  | Factorisation |  |
|  | Multiply out |  | Multiply out |
|  | Simplification | Simplification |  |
|  |  |  | Simplification of algebraic fraction |
| Graphs |  |  | Coordinates |
|  |  |  | Gradient of tangent |
|  |  |  | Gradient problem |
|  |  | Intercept | Intercept |
|  |  | Interpret |  |
|  | Points on quadratic problem |  |  |
|  |  | Recognise |  |
|  |  |  | Sketch related curve |
|  |  | Speed time |  |
| Reasoning |  | Equation |  |
| Functions |  | Composite |  |
|  |  | Inverse |  |
| Sequences |  |  | Fibonacci problem |
|  |  | Linear sequence problem |  |
|  |  |  | Reasoning |
|  |  | Triangular number |  |
| Other | Double inequality |  |  |

Ratio, proportion, and rates of change (*see Number - some overlap of topic areas)

| Ratio | n:1 form |  |  |
| :---: | :---: | :---: | :---: |
|  | Share into a ratio |  |  |
| Percentages |  |  | Greater than 100\% |
|  |  | Percentage of an amount |  |
|  |  | Reverse percentage |  |
| Conversion |  | Area |  |
|  |  |  | Mass |
| Applications |  |  | Average speed |
|  |  |  | Density |
|  | Graph problem |  |  |
|  |  |  | Inverse proportion |
|  |  | Iterative process |  |
|  |  | Rate |  |
|  |  |  | Ratio problem |
|  | Ratio to fraction problem |  |  |
|  |  |  | Relative frequency problem |
|  |  |  | Repeated percentage change |
|  |  | Speed |  |
|  |  | Vectors |  |


|  | Paper 1 | Paper 2 | Paper 3 |
| :---: | :---: | :---: | :---: |
| Geometry and measures |  |  |  |
| Shape |  | 3D Sine rule / Cosine rule |  |
|  |  |  | Arc length |
|  |  |  | Area of a triangle |
|  | Circle theorems |  | Circle theorems |
|  |  |  | Congruence |
|  |  |  | Enlargement |
|  | Invariant point |  |  |
|  | Isosceles triangle |  |  |
|  |  | Pythagoras |  |
|  | Reflection |  |  |
|  | Rotation |  |  |
|  |  | Similar triangles | Similar triangles |
|  |  | Sine rule / Cosine rule |  |
|  | Tangent to a circle problem |  |  |
|  |  |  | Translation |
|  | Trigonometry exact values |  |  |
| Area and Volume |  |  | Combined shape |
|  |  |  | Combined volumes |
|  |  | Perimeter problem |  |
|  |  | Surface area of cube |  |
|  |  | Trapezium | Trapezium |
|  |  |  | Triangle |
|  |  |  | Volume of cube |
|  |  |  | Volume of cone |
|  |  | Volume of cuboid problem |  |
|  |  |  | Volume of hemisphere |
| Vectors |  | Vector proof |  |
| Angles |  |  | In triangle |
| Other |  | Bearings |  |
|  | Column vectors |  |  |
|  | Geometric proof |  |  |

Statistics

|  |  | Box plot |  |
| :---: | :---: | :---: | :---: |
|  |  | Composite bar chart |  |
|  | Cumulative frequency graph |  |  |
|  | Cumulative frequency table |  |  |
| Diagrams | Frequency table |  |  |
| Diagams | Interpret |  |  |
|  |  | Interpret box plot |  |
|  |  | Interpret histogram |  |
|  |  |  | Two-way table |
|  | Venn diagram |  |  |
|  |  | Estimate mean from table |  |
|  | Lower quartile | Lower quartile |  |
|  |  |  | Mean problem |
| Measures | Median | Median |  |
|  | Range |  |  |
|  |  | Reasoning |  |
|  |  | Upper quartiles |  |
| Probability |  |  |  |
|  |  |  | Conditional probability |
|  |  | Dependent events |  |
|  |  |  | Exhaustive probabilities |
| Probability |  | Independent events |  |
|  |  |  | Independent probabilities |
|  |  |  | Mutually exclusive probabilities |
|  |  |  | Relative frequency |

Information
This advance information covers all examined components.

- There are no restrictions on who can use this
- The format/structure of the papers remains unchanged.
- For each paper the list shows the major focus of questions.
- The information is presented in specification order and not in question order.

Advice

- The following areas of content are suggested as key areas of focus for revision and final preparation, in relation to the NOV 2022 examinations.
- Students and teachers should consider how to revise other parts of the specification, for example to review whether other topics may provide knowledge which helps your understanding in relation to the areas being tested in NOV 2022
- Students will be credited for using any relevant or appropriate knowledge from any topic areas when answering questions.

This information is the same as the AQA provided information except that it has been reduced in size to only include information for this specific tier of entry ... any queries to support@justmaths.co.uk ... www.justmaths.co.uk

