**GCSE Mathematics: FOUNDATION REVISION LIST**

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| --- | --- | --- | --- | --- |
| **Topic List** | **Hegarty Maths Clip Numbers** |  |  |  |
| **Number** |
| * Using place value
 | **n/a** |  |  |  |
| * Decimal multiplication and division
 | [**48**](https://hegartymaths.com/multiplication-with-decimals)**,** [**49**](https://hegartymaths.com/division-with-decimal-answers)**,** [**50**](https://hegartymaths.com/division-of-decimals) |  |  |  |
| * Add, subtract, multiply and divide fractions
 | [**66**](https://hegartymaths.com/add-or-subtract-fractions-different-denominator)**,** [**68**](https://hegartymaths.com/multiplying-fractions-1)**,** [**69**](https://hegartymaths.com/multiplying-fractions-2)**,** [**70**](https://hegartymaths.com/dividing-fractions) |  |  |  |
| * Significant figures and estimation
 | [**130**](https://hegartymaths.com/round-to-significant-figures)**,** [**131**](https://hegartymaths.com/estimate-complex-calculations) |  |  |  |
| * Standard form
 | [**122**](https://hegartymaths.com/ordinary-to-standard-form)**,** [**123**](https://hegartymaths.com/standard-form-to-ordinary)**,** [**128**](https://hegartymaths.com/using-a-calculator-with-standard-form) |  |  |  |
| * Prime factor decomposition, HCF and LCM
 | [**30**](https://hegartymaths.com/prime-factorisation-2)**,** [**32**](https://hegartymaths.com/highest-common-factor-prime-factorisation)**,** [**35**](https://hegartymaths.com/lowest-common-multiple-prime-factorisation)**,** [**36**](https://hegartymaths.com/lcm-worded-problems) |  |  |  |
| * Fractions of an amount (non-calculator)
 | [**62**](https://hegartymaths.com/express-one-number-as-a-fraction-of-another)**,** [**67**](https://hegartymaths.com/multiply-whole-number-by-fractions)**,** [**80**](https://hegartymaths.com/fractions-worded-problems) |  |  |  |
| * Percentages of an amount
 | [**84**](https://hegartymaths.com/find-percentages-of-amounts-1-common-non-calc)**,** [**85**](https://hegartymaths.com/find-percentages-of-amounts-2-using-10-non-calc)**,** [**86**](https://hegartymaths.com/find-percentages-of-amounts-3-using-decimals-non-calc)**,** [**87**](https://hegartymaths.com/find-percentages-of-amounts-4-using-calculator) |  |  |  |
| * Percentage increase and decrease
 | [**88**](https://hegartymaths.com/percentage-increase-or-decrease-non-calc)**,** [**89**](https://hegartymaths.com/percentagedecimal-multipliers)**,** [**90**](https://hegartymaths.com/percentage-increase-or-decrease)**,** [**97**](https://hegartymaths.com/percentage-change) |  |  |  |
| * Compound interest and depreciation
 | [**94**](https://hegartymaths.com/compound-interest)**,** [**95**](https://hegartymaths.com/depreciation) |  |  |  |
| * Reverse percentages
 | [**96**](https://hegartymaths.com/reverse-percentages) |  |  |  |
| * Value for money (best buy)
 | **n/a** |  |  |  |
| * Ratio and Proportion
 | [**332**](https://hegartymaths.com/share-in-a-given-ratio-1)**,** [**333**](https://hegartymaths.com/share-in-a-given-ratio-2)**,** [**334**](https://hegartymaths.com/share-in-a-given-ratio-3)**,**[**339**](https://hegartymaths.com/direct-proportion-1) |  |  |  |
| **Algebra** |
| * Collecting like terms
 | [**156**](https://hegartymaths.com/collecting-like-terms-1)**,** [**157**](https://hegartymaths.com/collecting-like-terms-2)**,** [**158**](https://hegartymaths.com/simplifying-expressions-involving-multiplication)**,** [**159**](https://hegartymaths.com/simplifying-expressions-involving-division) |  |  |  |
| * Simplifying using the index laws
 | [**172**](https://hegartymaths.com/expressions-with-algebraic-fractions)**,** [**174**](https://hegartymaths.com/indices-with-algebraic-expressions-2)**,** [**175**](https://hegartymaths.com/indices-with-algebraic-expressions-3) |  |  |  |
| * Expand and simplify expressions with brackets
 | [**160**](https://hegartymaths.com/expand-a-single-bracket)**,** [**161**](https://hegartymaths.com/expand-two-single-brackets-simplify)**,** [**162**](https://hegartymaths.com/expand-double-brackets-1)**,** [**163**](https://hegartymaths.com/expand-double-brackets-2) |  |  |  |
| * Factorisation
 | [**168**](https://hegartymaths.com/factorise-simple-expressions-1)**,** [**169**](https://hegartymaths.com/factorise-simple-expressions-2) |  |  |  |
| * Sequences: finding the nth term rule
 | [**198**](https://hegartymaths.com/linear-sequences-nth-term) |  |  |  |
| * Substitution
 | [**155**](https://hegartymaths.com/writing-formulae-simple-substitution)**,** [**278**](https://hegartymaths.com/substitution-into-complex-formulae)**,** [**279**](https://hegartymaths.com/substitution-into-important-formulae) |  |  |  |
| * Trial and improvement
 | [**321**](https://hegartymaths.com/trial-improvement) |  |  |  |
| * Forming and solving equations
 | [**179**](https://hegartymaths.com/solve-2-step-equations-involving-multiplication)**,** [**180**](https://hegartymaths.com/solve-2-step-equations-involving-division)**,** [**184**](https://hegartymaths.com/solve-equations-with-x-on-both-sides-1)**,** [**185**](https://hegartymaths.com/solve-equations-with-x-on-both-sides-2) |  |  |  |
| * Represent inequalities on a number line; Solving linear inequalities
 | [**265**](https://hegartymaths.com/representing-inequalities-on-a-number-line)**,** [**266**](https://hegartymaths.com/writing-inequalities-from-a-number-line)**,** [**267**](https://hegartymaths.com/integer-solutions-to-inequalities) |  |  |  |
| * Simultaneous linear equations
 | [**190**](https://hegartymaths.com/simultaneous-equations-by-elimination-1-intro)**,** [**191**](https://hegartymaths.com/simultaneous-equations-by-elimination-2)**,** [**192**](https://hegartymaths.com/simultaneous-equations-by-elimination-3)**,** [**193**](https://hegartymaths.com/simultaneous-equations-by-elimination-4) |  |  |  |
| * Drawing straight line graphs; Finding the equation of a straight line
 | [**205**](https://hegartymaths.com/drawing-line-graphs-from-coordinates)**,** [**206**](https://hegartymaths.com/straight-line-graphs-1)**,** [**207**](https://hegartymaths.com/straight-line-graphs-2)**,** [**208**](https://hegartymaths.com/straight-line-graphs-3) |  |  |  |
| * Drawing quadratic graphs
 | [**251**](https://hegartymaths.com/drawing-quadratic-graphs-from-a-table) |  |  |  |
| * Real life graphs
 | **n/a** |  |  |  |
| * Solving quadratic equations by factorising
 | [**223**](https://hegartymaths.com/factorise-quadratic-expressions-1)**,** [**224**](https://hegartymaths.com/factorise-quadratic-expressions-2)**,** [**225**](https://hegartymaths.com/factorise-quadratic-expressions-3)**,** [**230**](https://hegartymaths.com/solving-quadratic-equations-1-by-factorising) |  |  |  |
| * Difference of two squares
 | [**165**](https://hegartymaths.com/expand-brackets-difference-of-two-squares) |  |  |  |
| **Geometry & Measures** |
| * Compound area
 | [**554**](https://hegartymaths.com/area-rectangles)**,** [**555**](https://hegartymaths.com/area-compound-shapes) |  |  |  |
| * Area of triangles, parallelograms and trapezia
 | [**556**](https://hegartymaths.com/area-parallelograms)**,**[**557**](https://hegartymaths.com/area-triangles-1)[**558**](https://hegartymaths.com/area-triangles-2)**,** [**559**](https://hegartymaths.com/area-trapezium) |  |  |  |
| * Area of a circle
 | [**534**](https://hegartymaths.com/circumference-of-a-circle-1)**,** [**535**](https://hegartymaths.com/circumference-of-a-circle-2)**,** [**536**](https://hegartymaths.com/circumference-of-a-circle-3)**,** [**537**](https://hegartymaths.com/circumference-of-a-circle-4) |  |  |  |
| * Circumference of a circle
 | [**539**](https://hegartymaths.com/area-of-a-circle-1)**,** [**540**](https://hegartymaths.com/area-of-a-circle-2)**,** [**541**](https://hegartymaths.com/area-of-a-circle-3)**,** [**542**](https://hegartymaths.com/area-of-a-circle-4) |  |  |  |
| * Volume of cuboids, prisms and cylinders
 | [**568**](https://hegartymaths.com/cuboids-1)**,** [**569**](https://hegartymaths.com/cuboids-2)**,** [**571**](https://hegartymaths.com/prisms-2)**,** [**572**](https://hegartymaths.com/cylinders-1) |  |  |  |
| * Angles on a line and around a point
 | [**477**](https://hegartymaths.com/angles-on-a-straight-line-1)**,** [**478**](https://hegartymaths.com/angles-on-a-straight-line-2)**,** [**479**](https://hegartymaths.com/angles-around-a-point)**,** [**480**](https://hegartymaths.com/vertically-opposite-angles) |  |  |  |
| * Angles in a triangle (including isosceles triangles)
 | [**485**](https://hegartymaths.com/angles-in-a-triangle-1)**,** [**486**](https://hegartymaths.com/angles-in-a-triangle-2)**,** [**487**](https://hegartymaths.com/angles-in-a-triangle-3) |  |  |  |
| * Alternate and corresponding angles (parallel lines)
 | [**481**](https://hegartymaths.com/alternate-angles)**,** [**482**](https://hegartymaths.com/co-interior-angles)**,** [**483**](https://hegartymaths.com/corresponding-angles) |  |  |  |
| * Interior and exterior angles of polygons
 | [**561**](https://hegartymaths.com/interior-angles-in-polygons-1)**,** [**562**](https://hegartymaths.com/interior-angles-in-polygons-2)**,** [**563**](https://hegartymaths.com/exterior-angles-in-polygons-1)**,** [**564**](https://hegartymaths.com/exterior-angles-in-polygons-2) |  |  |  |
| * Multi-step angle problems
 | [**488**](https://hegartymaths.com/multi-step-angle-problems-1)**,** [**489**](https://hegartymaths.com/multi-step-angle-problems-2)**,** [**490**](https://hegartymaths.com/multi-step-angle-problems-3)**,** [**491**](https://hegartymaths.com/multi-step-angle-problems-4) |  |  |  |
| * Draw and measure bearings
 | [**494**](https://hegartymaths.com/bearings-3)**,** [**493**](https://hegartymaths.com/bearings-2)**,** [**494**](https://hegartymaths.com/bearings-3)**,** [**495**](https://hegartymaths.com/bearings-4) |  |  |  |
| **Topic List** | **Hegarty Maths Clip Numbers** |  |  |  |
| **Geometry & Measures (Continued)** |
| * Constructions and loci
 | **n/a** |  |  |  |
| * Transformations: reflections, rotations, enlargements, translations
 | **n/a** |  |  |  |
| * Pythagoras’ theorem
 | [**498**](https://hegartymaths.com/pythagoras-longer-side)**,** [**499**](https://hegartymaths.com/pythagoras-shorter-side) |  |  |  |
| * Trigonometry in right-angled triangles
 | [**509**](https://hegartymaths.com/trigonometry-find-side-1)**,** [**510**](https://hegartymaths.com/trigonometry-find-side-2)**,** [**511**](https://hegartymaths.com/trigonometry-find-angle-1)**,** [**512**](https://hegartymaths.com/trigonometry-find-angle-2) |  |  |  |
| * Similar shapes
 | [**608**](https://hegartymaths.com/similar-polygons-1)**,** [**609**](https://hegartymaths.com/similar-polygons-2)**,** [**610**](https://hegartymaths.com/similar-polygons-3) |  |  |  |
| * Compound measures; converting metric units
 |  |  |  |  |
| **Statistics & Probability** |
| * Stem and leaf diagrams
 | [**430**](https://hegartymaths.com/stem-leaf-diagrams-1)**,** [**431**](https://hegartymaths.com/stem-leaf-diagrams-2) |  |  |  |
| * Questionnaires
 | [**399**](https://hegartymaths.com/surveys-questionnaires-1)**,** [**400**](https://hegartymaths.com/surveys-questionnaires-2)**,** [**401**](https://hegartymaths.com/data-collection-sheets-tally-charts) |  |  |  |
| * Scatter graphs
 | [**453**](https://hegartymaths.com/scatter-diagrams-1)**,** [**454**](https://hegartymaths.com/scatter-diagrams-2) |  |  |  |
| * Frequency polygons
 | [**441**](https://hegartymaths.com/frequency-polygons) |  |  |  |
| * Two way tables
 | [**422**](https://hegartymaths.com/two-way-tables-1)**,** [**423**](https://hegartymaths.com/two-way-tables-2) |  |  |  |
| * Mean from a grouped frequency table
 | [**417**](https://hegartymaths.com/mean-from-frequency-tables-1)**,** [**418**](https://hegartymaths.com/mean-from-frequency-tables-2) |  |  |  |
| * Pie Charts
 | [**427**](https://hegartymaths.com/pie-charts-1)**,** [**428**](https://hegartymaths.com/pie-charts-2) |  |  |  |
| * Box plots
 | [**434**](https://hegartymaths.com/box-plots-1)**,** [**435**](https://hegartymaths.com/box-plots-2)**,** [**436**](https://hegartymaths.com/box-plots-3) |  |  |  |
| * Cumulative frequency graphs
 | [**437**](https://hegartymaths.com/cumulative-frequency-diagrams-1)**,** [**438**](https://hegartymaths.com/cumulative-frequency-diagrams-2)**,** [**439**](https://hegartymaths.com/cumulative-frequency-diagrams-3) |  |  |  |
| * Stratified sampling
 | [**396**](https://hegartymaths.com/stratified-random-sampling-1)**,** [**397**](https://hegartymaths.com/stratified-random-sampling-2) |  |  |  |
| * Histograms
 | [**442**](https://hegartymaths.com/histograms-1)**,** [**443**](https://hegartymaths.com/histograms-2) |  |  |  |
| * Probability from a table
 | [**351**](https://hegartymaths.com/probability-of-single-events-1)**,** [**352**](https://hegartymaths.com/probability-of-single-events-2)**,** [**353**](https://hegartymaths.com/probability-of-an-event-not-happening)**,** [**354**](https://hegartymaths.com/mutually-exclusive-events) |  |  |  |
| * Probability: expected outcomes
 | [**355**](https://hegartymaths.com/expectation)**,** [**356**](https://hegartymaths.com/experimental-probability-relative-frequency) |  |  |  |
| * Probability tree diagrams
 | [**361**](https://hegartymaths.com/independent-events-probability-trees-1)**,** [**362**](https://hegartymaths.com/independent-events-probability-trees-2) |  |  |  |



**Exam Dates**

**Paper 1: Non- Calculator 24th May 2018**

**Paper 2: Calculator 7th June 2018**

**Paper 3: Calculator 12th June 2018**