# EDEXCEL HIGHER CHECKLIST 2017

## HIGHER - Grades 4 – 9

## Algebra

| I can do this | Title |
|---|---|
| | Approximate solutions to equations using iteration. |
| | Equation of a circle |
| | Equation of a tangent |
| | Algebra and Proof |
| | Gradients and area under a graph |
| | Graphs of trigonometric functions |
| | Quadratic equations (completing the square) |
| | Composite functions |
| | Expand the product of two or more binomials |
| | Factorising difficult quadratic expressions |
| | Geometric Sequences |
| | Graphs of exponential functions |
| | Quadratic equations (needing re-arrangement) |
| | Quadratic equations (quadratic formula) |
| | Real-life exponential graphs |
| | Represent quadratic inequalities |
| | Simultaneous equations (non-linear) |
| | Solve quadratic inequalities |
| | Translations and reflections of a function |
| | Turning points & completing the square |
| | Algebraic fractions |
| | Identifying parallel lines |
| | Inverse functions |
| | Linear inequalities in two variables |
| | nth term of a quadratic sequence |
| | Quadratic equations (factorisation) |
| | Quadratic equations (graphical methods) |
| | Represent linear inequalities |
| | Simultaneous equations (linear) |
| | Algebraic argument |
| | Algebraic terminology |

| | |
|---|---|
| | Cubic and Reciprocal graphs |
| | Deduce quadratic roots algebraically |
| | Derive an equation |
| | Equation of a line |
| | Expand the product of two binomials |
| | Factorising quadratic expressions |
| | Fibonacci, quadratic and simple geometric sequences |
| | Graphical solution to equations |
| | Inequalities on number lines |
| | Linear equations |
| | Quadratic graphs |
| | Reciprocal real-life graphs |
| | Simplify indices |
| | Simplify surds |
| | Solve linear inequalities in one variable |
| | Writing formulae and expressions |
| | Changing the subject |
| | Collecting like terms |
| | Expressions |
| | Factorise single bracket |
| | Finding the equation of a line |
| | Graphs of linear functions |
| | Graphs of quadratic functions |
| | Linear equations one unknown |
| | Multiplying single brackets |
| | Non-standard real life graphs |
| | nth term of a linear sequence |
| | Number machines |
| | Substitution |
| | Using "y = mx + c" |
| | |

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## Geometry and Measures

| I can do this | Title |
|---|---|
| | Circle theorems |
| | Vector arguments and proof |
| | Area of a triangle |
| | Cosine Rule |
| | Pythagoras and trig 2D and 3D |
| | Sine Rule |
| | Combined transformations |
| | Congruence and Similarity |
| | Standard trigonometric ratios |
| | Arc lengths and sectors |
| | Derive triangle results |
| | Enlargements and negative SF |
| | Loci |
| | Pythagoras |
| | Similarity and Congruence |
| | Standard constructions |
| | Surface Area |
| | Trigonometric ratios |
| | Volume |
| | Alternate and corresponding angles |
| | Area of a circle |
| | Areas of composite shapes |
| | Areas of triangles, trapezia and parallelograms |
| | Bearings |
| | Circle terminology |
| | Circumference of a circle |
| | Congruent triangles |
| | Enlargements and fractional SF |
| | Perimeter of 2D shapes |
| | Plans and elevations |
| | Polygons |
| | Solve geometrical problems |
| | Vector arithmetic |
| | Volume of prisms |

## Statistics

| I can do this | Title |
|---|---|
| | Boxplots |
| | Cumulative frequency |
| | Histograms with unequal class widths |
| | Quartiles and Interquartile Range |
| | Histograms with equal class widths |
| | Scatter graphs |
| | Comparing data using graphs |
| | Comparing Distributions |
| | Correlation |
| | Population |
| | Sampling |
| | Scatter Diagrams |
| | Time series |

## Probability

| I can do this | Title |
|---|---|
| | Conditional Probability |
| | Probability of dependent events |
| | Probability of independent events |
| | Mutually exclusive sum |
| | Relative Frequency |
| | Tables and Grids |
| | Theoretical Probability |
| | Unbiased Samples |
| | Venn Diagrams |

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## Number

| I can do this | Title |
|---|---|
| | Surds |
| | Index Laws (negative and fractional) |
| | Product rule |
| | Recurring Decimals |
| | Upper and lower bounds |
| | Finance 1 |
| | Powers and Roots |
| | Product of prime factors |
| | Using Pi |
| | Calculating with fractions |
| | Error intervals |
| | Index Laws |
| | Limits of accuracy |
| | Adding and subtracting fractions |
| | Checking calculations |
| | Compound measures |
| | Converting metric units |
| | Estimation |
| | Fractions and percentages |
| | Fractions and ratio problems |
| | Interpret calculator displays |
| | LCM and HCF |
| | Multiples and factors |
| | Multiplying fractions |
| | Operations |
| | Order of operations |
| | Powers |
| | Rounding |
| | Standard Form |
| | Terminating decimals and fractions |

| I can do this | Title |
|---|---|
| | Gradients and the rate of change |
| | General iterative processes |
| | Direct and inverse proportion |
| | Compound Units |
| | Gradient & the rate of change |
| | Growth and decay |
| | Interpret Proportion |
| | Percentage change |
| | Problems with compound units |
| | Scale factors and similarity |
| | Simple Interest and Financial Maths |
| | Solve Proportion Problems |
| | Compare Fractions, Decimals and Percentages |
| | Compare lengths, area, volume |
| | Comparing quantities as a ratio |
| | Division of a quantity as a ratio |
| | Express one quantity as a % of another |
| | Percentage change |
| | Problems involving ratio |
| | Proportion and ratio |
| | Ratio and fractions |
| | Ratio Sharing |

## Ratio, Proportion and rates of change

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**All papers 90 mins each**