#### **Year 11 Maths Revision Checklist**



# In February PPE (May also have been in last PPE) In last PPE



#### Number

Topic	Topic code	R	Α	G
Calculating with roots and fractional indices	U851, U985, U772, U299			
Converting recurring decimals to fractions	U689			
Surds	U338, U663, U872, U499			
Rationalising the denominator	U707, U281			
Error intervals	U657, U301, U587			
Ordering positive integers	U600			
Ordering decimals	U435			
Ordering negative numbers	U947			
Adding and subtracting positive integers	U417			
Multiplying and dividing positive integers	U127, U453			
Adding and subtracting negative numbers	U742			
Multiplying and dividing negative numbers	U548			
Adding and subtracting decimals	U478			
Multiplying and dividing with place value	U735			
Multiplying and dividing with decimals	U293, U868			
Order of operations	U976			
Prime numbers, prime factorisation	U236, U739			
Factors, multiples, HCF and LCM	U211, U751, U529			
Powers and roots	U851			
Using standard form	U330, U534			
Calculating with standard form	U264, U290, U161			
Equivalent fractions and simplifying fractions	U704, U646			
Mixed numbers and improper fractions	U692			
Ordering fractions	U746			
Addition and subtraction of fractions	U736, U793			
Multiplication and division of fractions	U475, U544			
Converting and ordering fractions, decimals and	U888, U594			
percentages				
Fractions of amounts	U881, U916			
Percentages of amounts	U554, U349			
Percentage change	<mark>U773, U671</mark>			
Reverse percentages	U286, U278			
Simple interest	U533			
Rounding	U480, U298			
Rounding to significant figures	U731, U965			
Estimating answers	U225			
Value for money	M681			



## Algebra

Topic	Topic code	R	Α	G
Expanding triple brackets	<mark>U606</mark>			
Changing the subject	<mark>U556</mark>			
Operations with algebraic fractions	U685, U457, U824			
Factorising quadratic expressions: ax <sup>2</sup> +bx+c	U858			
Simplifying algebraic fractions	<mark>U294</mark>			
Factorising to solve quadratic equations	<mark>U228, U960</mark>			
Using the quadratic formula	U665			
Completing the square to solve quadratics	<mark>U397, U589</mark>			
Quadratic equations in context	U150			
Quadratic simultaneous equations	<mark>U547</mark>			
Index laws	U235, U694, U662			
Equations of straight-line graphs (y=mx+c)	<mark>U315, U669</mark>			
Parallel lines	<mark>U377</mark>			
Perpendicular lines	<mark>U898</mark>			
Quadratic graphs	U989, U667			
Linear equations	U755, U325, U870, U505, U599			
Quadratic graphs: Turning points	<mark>U769</mark>			
Quadratic simultaneous equations on graphs	<mark>U875</mark>			
Exponential graphs	<mark>U229</mark>			
Exponential growth and decay problems	U988			
Trigonometric graphs	<mark>U450</mark>			
Graph transformations	U598, U487, U455			
Velocity-time graphs	U937, U562, U611			
Rate of change graphs	U638, U652, U862			
Estimating gradient from a curve	<mark>U800</mark>			
Estimating area under a curve	U882			
Equation of a circles and tangents	<mark>U567</mark>			
Linear inequalities as graph regions	U747			
Quadratic inequalities	<mark>U133</mark>			
Functions	U637, U895, U448, U996			
Linear sequences	U213, U530, U498, U978			
Recurrence relations	<mark>U171</mark>			
Quadratic sequences	<mark>U206</mark>			
Iteration and numerical methods	<mark>U434, U168</mark>			
Algebraic proof	U582			



#### **Geometry**

Topic	Topic code	R	Α	G
Congruence proofs	U866, U887			
Enlargements	U134			
Describe combined transformations	<mark>U766</mark>			
Circle theorems: Angles inside a circle	U459, U251			
Circle theorems: Tangents and chords	U489, U130			
Circle theorems problems	<mark>U808</mark>			
Prove circle theorems	U807			
Volume of frustums	U350			
Volume: Problem solving	U543, U426			
Similar Shapes: Area and volume	U630, U110			
Pythagoras' Theorem in 2D and 3D	U385, U541			
Right-angled trigonometry: Problem solving	<mark>U319, U283, U545, U967</mark>			
3D trigonometry	U170			
The area rule (1/2absinC)	U592			
Sine rule	<mark>U952</mark>			
Cosine rule	<mark>U591</mark>			
Trigonometry and bearings	U164			
Exact trigonometric values	<mark>U319</mark>			
Vectors problems	U781, U560			
Properties of 2D shapes	U121, U849			
Properties of 3D shapes	U719			
Nets of 3D shapes	U761			
Angles: Measuring, Drawing and Estimating	<mark>U447</mark>			
Combining angle facts	<mark>U655</mark>			
Angles in a quadrilateral	U732, U329			
Angles in polygons	<mark>U427</mark>			
Bearings	U525, U107			
Translations	U196			
Reflections	U799			
Enlargements	U519			
Rotations	U696			
Area of triangles, parallelograms and trapeziums	U945, U575, U424, U265, U343			
Circles	U767			
Circumference	U604, U221			
Circle area	U950, U373			
Surface area	<mark>U929, U259, U871</mark>			
Volume of cuboids	U786			
Volume of prisms and cylinders	U174, U915			
Similar shapes	U551, U578			
Scale diagrams	<mark>U257</mark>			

#### **Probability**



Topic	Topic code	R	Α	G
Probability scale	U803			
Probability of single events	U408, U510, U683			
Experimental probability	U580			
Expected outcomes	<mark>U166</mark>			
Listing elements in a set	U748, U296			
Frequency trees	U280			
Sample space diagrams	U104			
Tree diagrams	<mark>U558, U729</mark>			
Product rule for counting	<mark>U369</mark>			
Conditional probability	<mark>U246, U821, U806</mark>			
Probability from Venn diagrams	U476, U748, U699			

#### **Statistics**

Торіс	Topic code	R	Α	G
Collecting data, frequency tables	U322, U120			
Two-way tables	U981			
Bar charts	U363, U557			
Pictograms	U506			
Pie charts	U508, U172			
Stem and leaf diagrams	U200, U909			
Choosing averages	U717			
Scatter graphs	U199, U277, U128			
Averages	U877, U717			
Cumulative frequency diagrams	U182, U642			
Box plots	U879, U837, U507			
Frequency polygons	<mark>U840</mark>			
Histograms	U814, U983, U267			
Capture-recapture	U328			

## **Ratio and proportion**

Topic	Topic code	R	Α	G
Algebraic direct and inverse proportion	U407, U138			
Distance-time graphs	U403, U914, U462, U966			
Compound units: Density problem solving	U910			
Simplifying ratios	<mark>U687</mark>			
Sharing amounts in a ratio	<mark>U753, U577</mark>			
Converting between ratios, fractions and percentages	<mark>U176</mark>			
Inverse proportion scaling method	U357, U364			
Proportion graphs	<mark>U238</mark>			
Units of measure: Length, Mass and Capacity	U102, U388			
Conversion graphs	U652, U638, U862			_
Compound units: Speed	U151			