KS3 Maths Revision

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Themes

Number

<u>Algebra</u>

Ratio, Proportion, Rates of change

Geometry and measures

Probability

Statistics



Number

Negative numbers

Fractions

Decimals

Place Value

Order of operations

Multiples, factors and primes

<u>Indices</u>

Standard Form

Estimation

Rounding

Error Intervals



Negative numbers

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Topic	Video	Worksheet	Answers
Negative numbers	https://www.mathsgen ie.co.uk/negativenumb ers.php	https://www.mathsgen ie.co.uk/resources/1- negative-numbers.pdf	https://www.mathsgen ie.co.uk/resources/1- negative- numbersans.pdf

Fractions

Topic	Video	Worksheet	Answers
Writing. simplifying and ordering fractions	Maths Genie • Writing, Simplifying and Ordering Fractions	2-writing-simplifying- and-ordering- fractions.pdf	2-writing-simplifying- and-ordering- fractionsans.pdf
Fractions of an amount	Maths Genie • Finding a Fraction of an Amount	2-fractions-of-an- amount-ws.pdf	2-fractions-of-an- amountans.pdf
Fractions, decimals and percentages	Maths Genie • Fractions, Decimals and Percentages	2-fractions-decimals- and-percentages.pdf	2-fractions-decimals- and-percentagesans.pdf
Fractions (adding, subtracting, multiplying and dividing).	Maths Genie • Adding, Subtracting, Multiplying and Dividing Fractions	3-fractions.pdf	3-fractionsans.pdf

Decimals

Topic	Video	Worksheet	Answers
Addition of decimals	Adding Decimals Video – Corbettmaths	Decimals Addition Subtraction	Decimals-Adding-and- Subtracting- Answers.pdf
Subtraction of decimals	Subtracting Decimals Video – Corbettmaths	Decimals Addition Subtraction	Decimals-Adding-and- Subtracting- Answers.pdf
Multiplying decimals	Multiplying decimals Video – Corbettmaths	Decimals Multiplying Dividing	Multiplying-Dividing- Decimals-Answers.pdf
Ordering decimals	Ordering Decimals Video – Corbettmaths	Ordering Decimals	Ordering-Decimals- Answers.pdf

Place Value

Topic	Video	Worksheet	Answers
Place Value	Maths Genie • Place Value	1-place-value.pdf	1-place-valueans.pdf



Order of operations

Topic	Video	Worksheet	Answers
BIDMAS	Maths Genie • The Order	1-the-order-of-	1-the-order-of-
	of Operations (BIDMAS)	operations.pdf	operationsans.pdf

Factors, multiples and primes

Topic	Video	Worksheet	Answers
Factors, multiples and primes	Maths Genie • Factors, Multiples and Primes	1-factors-multiples-and- primes.pdf	1-factors-multiples-and- primesans.pdf
Prime Factors, HCF and LCM	Maths Genie - Revision - The Highest Common Factor (HCF) and The Lowest Common Multiple (LCM)	4-HCF-and-LCM.pdf	4-HCF-and-LCMans.pdf

Indices

Topic	Video	Worksheet	Answers
Powers and indices	<u>Indices Video –</u> <u>Corbettmaths</u>	Indices	indices-answers.pdf



Standard form

Topic	Video	Worksheet	Answers
Converting standard form	<u>Maths Genie - Revision - Standard Form</u>	5-standard-form.pdf	5-standard-formans.pdf
Adding numbers in standard form	<u>Maths Genie - Revision - Standard Form</u>	5-standard-form.pdf	5-standard-formans.pdf
Multiplying and dividing numbers in standard form	<u>Maths Genie - Revision - Standard Form</u>	5-standard-form.pdf	5-standard-formans.pdf
Standard form	<u>Maths Genie - Revision - Standard Form</u>	5-standard-form.pdf	5-standard-formans.pdf

Estimation

Topic	Video	Worksheet	Answers
Estimating calculations	Maths Genie ● Estimating Answers	3-estimation.pdf	3-estimationans.pdf

Rounding

Topic	Video	Worksheet	Answers
Rounding	https://www.mathsgenie. co.uk/rounding.php	https://www.mathsgenie. co.uk/resources/1- rounding-ws.pdf	https://www.mathsgenie. co.uk/resources/1- roundingans.pdf

Error Intervals

Topic	Video	Worksheet	Answers
Error Intervals	https://corbettmaths.com /2017/12/16/error- intervals/	https://corbettmaths.com /wp- content/uploads/2023/05 /Error-Intervals.pdf	https://corbettmaths.com /wp- content/uploads/2023/05 /Error-Intervals- Answers.pdf

Algebra

Algebraic notation

Substitution

Collecting like terms

Expanding a single bracket

Expanding double brackets

Factorising into a single bracket

Factorising into double brackets

Index Laws

Changing the subject of a formula

Solve equations

Straight line graphs

Quadratic, cubic and reciprocal graphs

<u>Simultaneous equations</u>

Solve inequalities

nth term of linear sequences

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Algebraic Notation

Topic	Video	Worksheet	Answers
Forming algebraic expressions	Algebraic Notation Video - Corbettmaths	Forming Expressions Exercise 16	Algebra-forming expressions

Substitution

Topic	Video	Worksheet	Answers
Substitution	Maths Genie ● Substitution	3-substitution.pdf	3-substitutionans.pdf

Collecting like terms

Topic	Video	Worksheet	Answers
Simplifying algebraic expressions	Maths Genie •	2-simplifying-	2-simplifying-
	Simplifying Algebra	algebra.pdf	algebraans.pdf

Expanding single brackets

Topic	Video	Worksheet	Answers
Expanding single brackets	Maths Genie - Revision - Expanding and Factorising	4-expanding-and- factorising.pdf	4-expanding-and- factorisingans.pdf

Expanding double brackets

Topic	Video	Worksheet	Answers
Expanding quadratics	Maths Genie - Revision - Expanding and Factorising Quadratics	5-expanding-and- factorising- quadratics.pdf	5-expanding-and- factorising- quadraticsans.pdf

Factorising - single bracket

Topic	Video	Worksheet	Answers
Factorising into single brackets	Maths Genie - Revision - Expanding and Exertising Quadratics	4-expanding-and- factorising.pdf	4-expanding-and- factorisingans.pdf
	Factorising Quadratics		

Factorising – double brackets

Topic	Video	Worksheet	Answers
Factorising quadratics	Maths Genie - Revision - Expanding and Factorising Quadratics	5-expanding-and- factorising- quadratics.pdf	5-expanding-and- factorising- quadraticsans.pdf

Index Laws

Topic	Video	Worksheet	Answers
Indices	Maths Genie - Revision - Indices	4-indices.pdf	4-indicesans.pdf

Changing the subject of a formula

Topic	Video	Worksheet	Answers
Changing the subject to a formula	Maths Genie - Revision - Changing the Subject of a Formula	5-changing-the- subject.pdf	5-changing-the- subjectans.pdf

Solving equations

Topic	Video	Worksheet	Answers
Solving one- step equations	Maths Genie • Solving One Step Equations	3-solving-one-step- equations.pdf	3-solving-one-step- equationsans.pdf
Solving two-step equations	Maths Genie • Solving Equations	3-solving-equations.pdf	3-solving- equationsans.pdf

Straight line graphs

Topic	Video	Worksheet	Answers
Drawing straight line graphs	https://www.mathsgenie. co.uk/lineargraphs.php	https://www.mathsgenie. co.uk/resources/3-linear- graphs.pdf	https://www.mathsgenie. co.uk/resources/3-linear- graphsans.pdf
The equation of a straight line – gradient and intercept	https://corbettmaths.com/2013/05/29/finding-the-equation-of-a-straight-line/	https://corbettmaths.com /wp- content/uploads/2013/02 /equation-of-a-line- pdf.pdf	https://corbettmaths.com /wp- content/uploads/2021/04 /equation-of-a-line.pdf

Quadratic, cubic and reciprocal graphs

Topic	Video	Worksheet	Answers
Quadratic Graphs	https://www.mathsgeni e.co.uk/quadratic- graphs.php	https://www.mathsgenie. co.uk/resources/5- quadratic-graphs-ws.pdf	https://www.mathsgeni e.co.uk/resources/5- quadratic- graphsans.pdf
Cubic Graphs	https://corbettmaths.co m/2016/08/07/cubic- graphs/	https://corbettmaths.co m/wp- content/uploads/2013/0 2/cubic-graphs-pdf.pdf	https://corbettmaths.co m/wp- content/uploads/2015/0 3/cubics-answers.pdf
Reciprocal Graphs	http://corbettmaths.co m/2013/10/24/reciproca l-graphs/	https://corbettmaths.co m/2018/04/04/reciproca l-graphs-2/	https://corbettmaths.co m/2018/04/04/reciproca l-graphs-2/

Simultaneous equations

Topic	Video	Worksheet	Answers
Simultaneous equations	Maths Genie - Revision - Simultaneous Equations	5-simultaneous- equations.pdf	5-simultaneous- equationsans.pdf
Solving simultaneous equations graphically	Maths Genie - Revision - Solving Simultaneous Equations Graphically	5-solving-simultaneous- equations- graphically.pdf	5-solving-simultaneous- equations- graphicallyans.pdf

Solving inequalities

Topic	Video	Worksheet	Answers
Solving inequalities on a number line	Maths Genie - Revision - Writing and Solving Inequalities	4-inequalities.pdf	4-inequalitiesans.pdf
Solving inequalities	Maths Genie - Revision - Writing and Solving Inequalities	4-inequalities.pdf	4-inequalitiesans.pdf

nth term of linear sequences

Topic	Video	Worksheet	Answers
Types of sequences	https://youtu.be/2vZAiA Ha2GY	4-sequences.pdf	4-sequencesans.pdf
Generating sequences	https://youtu.be/- 6073LQsEmw	4-sequences.pdf	4-sequencesans.pdf
Finding the Nth term	https://youtu.be/fifedKP yLLA	4-sequences.pdf	4-sequencesans.pdf
Sequences and finding the Nth term	https://youtu.be/Tv9Oby QOGAc	4-sequences.pdf	4-sequencesans.pdf

Ratio, Proportion and Rates of change

Speed, density and pressure

Ratio

<u>Percentages</u>

Direct and inverse proportion



Speed, density and pressure

Topic	Video	Worksheet	Answers
Speed, distance and time	https://corbettmaths.com/2016/01/01/speed-distance-time/	https://corbettmaths.com /wp- content/uploads/2013/02 /speed-distance-time- pdf1.pdf	https://corbettmaths.com /wp- content/uploads/2016/02 /speed-distance-time- answers.pdf
Density, mass and volume	https://corbettmaths.com/2016/06/07/density/	https://corbettmaths.com /wp- content/uploads/2023/04 /Density.pdf	https://corbettmaths.com /wp- content/uploads/2023/04 /Density-Answers.pdf
Pressure	https://corbettmaths.com/2016/07/28/pressure/	https://corbettmaths.com /wp- content/uploads/2023/09 /Pressure.pdf	https://corbettmaths.com /wp- content/uploads/2023/09 /Pressure-Answers.pdf

Ratio

Topic	Video	Worksheet	Answers
Writing and simplifying ratio	https://www.mathsgenie. co.uk/writing-simplifying- ratio.php	https://www.mathsgenie. co.uk/resources/3- writing-and-simplifying- ratio.pdf	https://www.mathsgenie. co.uk/resources/3- writing-and-simplifying- ratioans.pdf
Sharing in a ratio	https://www.mathsgenie. co.uk/ratio.php	https://www.mathsgenie. co.uk/resources/3- sharing-ratio.pdf	https://www.mathsgenie. co.uk/resources/3- sharing-ratioans.pdf

Percentages

Topic	Video	Worksheet	Answers
Fractions, decimals and percentages	https://www.mathsgenie.co. uk/FDP.php	https://www.mathsgenie.co. uk/resources/2-fractions- decimals-and- percentages.pdf	https://www.mathsgenie.co. uk/resources/2-fractions- decimals-and- percentagesans.pdf
Percentages	https://www.mathsgenie.co. uk/percentages.php	https://www.mathsgenie.co. uk/resources/3- percentages.pdf	https://www.mathsgenie.co. uk/resources/3- percentagesans.pdf
Reverse percentages	https://www.mathsgenie.co. uk/reverse-percentages.php	https://www.mathsgenie.co. uk/resources/5-reverse- percentages.pdf	https://www.mathsgenie.co. uk/resources/5-reverse- percentagesans.pdf
Compound interest	https://www.mathsgenie.co.uk/compound-interest.php	https://www.mathsgenie.co. uk/resources/4-compound- interest.pdf	https://www.mathsgenie.co. uk/resources/4-compound- interestans.pdf

Direct and inverse proportion

Topic	Video	Worksheet	Answers
Direct and inverse proportion	https://www.mathsgenie. co.uk/proportion.php	https://www.mathsgenie. co.uk/resources/5-direct- and-inverse- proportion.pdf	https://www.mathsgenie. co.uk/resources/5-direct- and-inverse- proportionans.pdf

Geometry and measures

Angles

Area and perimeter

Transformations

Constructions and loci

Similar shapes

Congruency

Parts of a circle

<u>Volume</u>

Surface area

Plans and elevations

Pythagoras

Trigonometry

Exact trig values

Vectors



Angles

Topic	Video	Worksheet	Answers
Angle facts	Maths Genie • Angles	2-angles.pdf	2-anglesans.pdf
Angles in Parallel lines	https://youtu.be/dur7iN 0nwZs	https://www.mathsgeni e.co.uk/resources/4- angles-in-parallel- lines.pdf	https://www.mathsgeni e.co.uk/resources/4- angles-in-parallel- linesans.pdf
Angles in Polygons	https://www.mathsgenie. co.uk/angles- polygons.php	https://www.mathsgeni e.co.uk/resources/4- angles-in-polygons.pdf	https://www.mathsgeni e.co.uk/resources/4- angles-in- polygonsans.pdf

Area and perimeter

Topic	Video	Worksheet	Answers
Area and perimeter	https://www.mathsgeni e.co.uk/area- perimeter.php	https://www.mathsgeni e.co.uk/resources/2- area-and-perimeter- ws.pdf	https://www.mathsgeni e.co.uk/resources/2- area-and- perimeterans.pdf
Area and circumference of circles	https://www.mathsgeni e.co.uk/circles.php	https://www.mathsgeni e.co.uk/resources/3- circles-area-and- circumference-ws.pdf	https://www.mathsgeni e.co.uk/resources/3- circles-area-and- circumferenceans.pdf
Area of compound shapes	https://www.mathsgeni e.co.uk/compound- shapes.php	https://www.mathsgeni e.co.uk/resources/37_ar ea-of-compound- shapes-ws.pdf	https://www.mathsgeni e.co.uk/resources/37_ar ea-of-compound- shapesans.pdf

Transformations

Topic	Video	Worksheet	Answers
Translation	https://youtu.be/leHYLE Pe0ZE	https://www.mathsgeni e.co.uk/resources/3- rotations.pdf	https://www.mathsgeni e.co.uk/resources/3- rotationsans.pdf
Rotation	https://youtu.be/bS9naY K7Nw0	https://www.mathsgeni e.co.uk/resources/3- reflections.pdf	https://www.mathsgeni e.co.uk/resources/3- reflectionsans.pdf
Reflection	https://youtu.be/RAOcT mX7nS4	https://www.mathsgeni e.co.uk/resources/3- enlargements.pdf	https://www.mathsgeni e.co.uk/resources/3- enlargementsans.pdf
Enlargement	https://youtu.be/UUzhM 0hAifA	https://www.mathsgeni e.co.uk/resources/3- translations.pdf	https://www.mathsgeni e.co.uk/resources/3- translationsans.pdf

Constructions and loci

Topic	Video	Worksheet	Answers
Loci and construction	https://www.mathsgeni e.co.uk/loci-and- construction.php	https://www.mathsgeni e.co.uk/resources/4- loci-and- construction.pdf	https://www.mathsgeni e.co.uk/resources/4- loci-and- constructionans.pdf

Similar shapes

Topic	Video	Worksheet	Answers
Similar shapes (lengths)	https://www.mathsgeni	https://www.mathsgeni	https://www.mathsgeni
	e.co.uk/similar-shapes-	e.co.uk/resources/5-	e.co.uk/resources/5-
	<u>length.php</u>	similar-shapes.pdf	similar-shapesans.pdf

Congruency

Topic	Video	Worksheet	Answers
Congruent shapes	http://corbettmaths.co m/2012/08/10/congruen t-and-similar-shapes/	https://corbettmaths.co m/2019/08/28/congruen t-and-similar-shapes- practice-questions/	https://corbettmaths.co m/2019/08/28/congruen t-and-similar-shapes- practice-questions/
Congruent triangles	http://corbettmaths.co m/2013/04/15/congruen t-triangles/	https://corbettmaths.co m/2018/04/04/congruen t-triangles-2/	https://corbettmaths.co m/2018/04/04/congruen t-triangles-2/

Parts of a circle

Topic	Video	Worksheet	Answers
Parts of a circle	http://corbettmaths.co m/2013/12/21/parts-of- the-circle-video-61/	https://corbettmaths.co m/2019/08/28/parts-of- a-circle-practice- questions/	https://corbettmaths.co m/2019/08/28/parts-of- a-circle-practice- questions/

Volume

Topic	Video	Worksheet	Answers
Volume of a prism	https://www.mathsgeni e.co.uk/volume.php	https://www.mathsgeni e.co.uk/resources/4- volume-of-a-prism.pdf	https://www.mathsgeni e.co.uk/resources/4- volume-of-a- prismans.pdf

Surface area

Topic	Video	Worksheet	Answers
Surface Area	https://www.mathsgeni	https://www.mathsgeni	https://www.mathsgeni
	e.co.uk/surfacearea.ph	e.co.uk/resources/4-	e.co.uk/resources/4-
	<u>p</u>	surface-area.pdf	surface-areaans.pdf

Plans and elevations

Topic	Video	Worksheet	Answers
Plans and evelations	https://www.mathsgeni	https://www.mathsgeni	https://www.mathsgeni
	e.co.uk/plans-and-	e.co.uk/resources/4-	e.co.uk/resources/4-
	<u>elevations.php</u>	plans-and-	plans-and-
		elevations.pdf	elevationsans.pdf

Plans and elevations

Topic	Video	Worksheet	Answers
Pythagoras	https://www.mathsgeni e.co.uk/pythagoras.php	https://www.mathsgeni e.co.uk/resources/4-	https://www.mathsgeni e.co.uk/resources/4-
		pythagoras.pdf	pythagorasans.pdf

Trigonometry

Topic	Video	Worksheet	Answers
SOH CAH TOA	https://www.mathsgenie.	https://www.mathsgeni	https://www.mathsgeni
(Trigonometry)	co.uk/sohcahtoa.php	e.co.uk/resources/5-	e.co.uk/resources/5-
		SOHCAHTOA-ws.pdf	SOHCAHTOAans.pdf

Exact Trig Values

Topic	Video	Worksheet	Answers
Exact Trig Values	https://www.mathsgeni	https://www.mathsgeni	https://www.mathsgeni
	e.co.uk/exact-trig-	e.co.uk/resources/5-	e.co.uk/resources/5-
	<u>values.php</u>	exact-trig-values-ws.pdf	SOHCAHTOAans.pdf

Vectors

Topic	Video	Worksheet	Answers
Vectors	https://www.mathsgeni	https://www.mathsgeni	https://www.mathsgeni
	e.co.uk/column-	e.co.uk/resources/5-	e.co.uk/resources/5-
	vectors.php	vectors.pdf	vectorsans.pdf

Probability

Basic probability
Sample space diagrams
Relative frequency
Venn diagrams
Tree diagrams



Basic Probability

Topic	Video	Worksheet	Answers
Probability	https://www.mathsgenie.c o.uk/probability.php	https://www.mathsgenie.c o.uk/resources/2-writing- probability-and-the- probability-scale.pdf	https://www.mathsgenie.c o.uk/resources/2-writing- probability-and-the- probability-scaleans.pdf
Basic probability	http://corbettmaths.com/2 013/06/15/probability/	https://corbettmaths.com/ 2019/09/27/probability- textbook-exercise/	https://corbettmaths.com/ wp- content/uploads/2015/03/p robability.pdf
Not happening	http://corbettmaths.com/2 013/05/15/probability-of- not-happening/	https://corbettmaths.com/ wp- content/uploads/2013/02/p robability-pdf.pdf	https://corbettmaths.com/ wp- content/uploads/2015/03/p robability.pdf
Scale	http://corbettmaths.com/2 013/05/12/probability- scale/	https://corbettmaths.com/ wp- content/uploads/2013/02/p robability-pdf.pdf	https://corbettmaths.com/ wp- content/uploads/2015/03/p robability.pdf

Sample space

Topic	Video	Worksheet	Answers
Sample Space	http://corbettmaths.co	https://corbettmaths.co	https://corbettmaths.co
	m/2013/06/18/sample-	m/2019/09/04/sample-	m/2019/09/04/sample-
	space-diagrams/	space-practice-	space-practice-
		questions/	questions/

Relative frequency

Topic	Video	Worksheet	Answers
Relative Frequency	https://www.mathsgeni e.co.uk/probability2.php	https://www.mathsgeni e.co.uk/resources/4-	https://www.mathsgeni e.co.uk/resources/4-
		probability-and-relative- frequency-ws.pdf	probability-and-relative- frequencyans.pdf

Venn Diagrams

Topic	Video	Worksheet	Answers
Probability from Venn Diagrams	https://corbettmaths.com/2016/08/07/venn-diagrams/	https://corbettmaths.co m/wp- content/uploads/2013/0 2/venn-diagrams- pdf.pdf	https://corbettmaths.co m/wp- content/uploads/2015/0 3/venn-diagrams- answers.pdf

Tree Diagrams

Topic	Video	Worksheet	Answers
Probability Trees	https://www.mathsgeni	https://www.mathsgeni	https://www.mathsgeni
	e.co.uk/probability-	e.co.uk/resources/5-	e.co.uk/resources/5-
	trees.php	probability-trees.pdf	probability-treesans.pdf

Statistics

Charts and graphs
Averages and range
Scatter graphs

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Charts and graphs

Topic	Video	Worksheet	Answers
Bar Charts	https://www.mathsgenie. co.uk/bar-charts.php	https://www.mathsgenie. co.uk/resources/2-bar- charts-ws.pdf	https://www.mathsgenie. co.uk/resources/2-bar- chartsans.pdf
Pictograms	https://www.mathsgenie. co.uk/pictograms.php	https://www.mathsgenie. co.uk/resources/1- pictograms-ws.pdf	https://www.mathsgenie. co.uk/resources/1- pictogramsans.pdf
Pie Charts	https://www.mathsgenie. co.uk/pie-charts.php	https://www.mathsgenie. co.uk/resources/3-pie- charts-ws.pdf	https://www.mathsgenie. co.uk/resources/3-pie- chartsans.pdf

Averages and range

Topic	Video	Worksheet	Answers
Mean, median, mode and range	https://www.mathsgenie. co.uk/averages.php	https://www.mathsgenie. co.uk/resources/2- averages-ws.pdf	https://www.mathsgenie. co.uk/resources/2- averagesans.pdf
Averages from frequency tables	https://www.mathsgenie. co.uk/mean-tables.php	https://www.mathsgenie. co.uk/resources/4- averages-from-frequency- tables-ws.pdf	https://www.mathsgenie. co.uk/resources/4- averages-from-frequency- tablesans.pdf

Scatter graphs

Topic	Video	Worksheet	Answers
Scatter graphs	https://www.mathsgenie. co.uk/scatter-graphs.php	https://www.mathsgenie. co.uk/resources/4- scatter-graphs.pdf	https://www.mathsgenie. co.uk/resources/4- scatter-graphsans.pdf