5th Form Mathematics Revision List – Trial Exam Paper 2 (March 2020)

Use the topic checklist below to help you identify which topics require the most revision. On the subsequent pages, there are links to videos, worksheets, MyMaths lessons and MyMaths homework for each topic (where available). For each of the worksheets, you can use the links or the QR codes provided to find solutions.

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| --- | --- | --- | --- |
| Topic | Minimal  Revision  Required | Some  Revision  Required | Top  Revision  Priority |
| Prime factorisation |  | X |  |
| Fractions (division) |  | X |  |
| Bearings |  | X |  |
| Set notation | X |  |  |
| Parallel line theorems | X |  |  |
| Ratio |  | X |  |
| Percentage change |  | X |  |
| Compound interest | X |  |  |
| Simultaneous equations (linear) |  |  | X |
| Solving quadratic equations | X |  |  |
| Cumulative frequency diagrams | X |  |  |
| Probability tree diagrams | X |  |  |
| Laws of indices |  |  | X |
| Fractional and negative indices |  | X |  |
| Graphical methods of solving equations |  | X |  |
| Inverse proportion |  | X |  |
| Straight line graphs | X |  |  |
| Perpendicular lines | X |  |  |
| Graphical inequalities | X |  |  |
| Circle theorems |  | X |  |
| Surds (rationalising the denominator) |  | X |  |
| Sine rule | X |  |  |
| Cosine rule | X |  |  |
| Inverse and composite functions | X |  |  |
| Addition and subtraction of algebraic fractions | X |  |  |
| Similar shapes (lengths, areas and volumes) |  | X |  |
| Differentiation | X |  |  |
| Stationary points | X |  |  |

Prime Factorisation

Video: https://corbettmaths.com/2012/08/20/product-of-primes/

Worksheet: https://corbettmaths.com/wp-content/uploads/2013/02/product-of-primes-pdf3.pdf

MyMaths Lesson: https://app.mymaths.co.uk/151-lesson/highest-common-factor

MyMaths Homework: https://app.mymaths.co.uk/151-homework/highest-common-factor

Fractions (Division)

Video: https://corbettmaths.com/2012/08/21/division-with-fractions/

Worksheet: https://corbettmaths.com/wp-content/uploads/2018/11/Dividing-Fractions-pdf.pdf

MyMaths Lesson: https://app.mymaths.co.uk/94-lesson/dividing-fractions

MyMaths Homework: https://app.mymaths.co.uk/94-homework/dividing-fractions

Bearings

Video: https://corbettmaths.com/2018/08/31/back-bearings/

Worksheet: https://corbettmaths.com/wp-content/uploads/2013/02/bearings-exercise-26-pdf.pdf

MyMaths Lesson: https://app.mymaths.co.uk/255-lesson/bearings

MyMaths Homework: https://app.mymaths.co.uk/255-homework/bearings

Sets

Video: https://corbettmaths.com/2019/03/27/set-notation/

Worksheet: https://mathsmadeeasy.co.uk/wp-content/uploads/2020/02/Set-Notation-Questions-MME.pdf

MyMaths Lessons: https://app.mymaths.co.uk/1730-lesson/venn-diagrams-2 https://app.mymaths.co.uk/1659-lesson/venn-diagrams-introduction

MyMaths Homework:

https://app.mymaths.co.uk/1730-homework/venn-diagrams-2

https://app.mymaths.co.uk/1659-homework/venn-diagrams-introduction

Parallel line theorems

Video: https://corbettmaths.com/2013/04/04/parallel-lines-angles/

Worksheet: https://corbettmaths.com/wp-content/uploads/2013/02/angles-in-parallel-lines-pdf1.pdf

MyMaths Lesson: https://app.mymaths.co.uk/258-lesson/angles-in-parallel-lines

MyMaths Homework: https://app.mymaths.co.uk/258-homework/angles-in-parallel-lines

Ratio

Video: https://corbettmaths.com/2013/03/03/ratio-sharing-the-total/

Worksheet: https://corbettmaths.com/wp-content/uploads/2013/02/ratio-sharing-the-total-pdf.pdf

MyMaths Lesson: https://app.mymaths.co.uk/160-lesson/ratio-dividing-2

MyMaths Homework: https://app.mymaths.co.uk/160-homework/ratio-dividing-2

Percentage change

Video: https://corbettmaths.com/2012/08/21/multipliers-for-increasing-and-decreasing-by-a-percentage/

Worksheet: https://corbettmaths.com/wp-content/uploads/2021/11/Increasing-by-a-Percentage-pdf.pdf

MyMaths Lesson: https://app.mymaths.co.uk/144-lesson/percentage-change-2

MyMaths Homework: https://app.mymaths.co.uk/144-homework/percentage-change-2

Compound interest

Video: https://corbettmaths.com/2012/08/21/compound-interest/

Worksheet: https://corbettmaths.com/wp-content/uploads/2019/09/Compound-Interest-pdf-1.pdf

MyMaths Lesson: https://app.mymaths.co.uk/106-lesson/compound-interest

MyMaths Homework: https://app.mymaths.co.uk/106-homework/compound-interest

Simultaneous equations (linear)

Video: https://corbettmaths.com/2013/03/05/simultaneous-equations-elimination-method/

Worksheet: https://corbettmaths.com/wp-content/uploads/2019/04/Simultaneous-Equations.pdf

MyMaths Lesson: https://app.mymaths.co.uk/197-lesson/simultaneous-equations-2

MyMaths Homework: https://app.mymaths.co.uk/197-homework/simultaneous-equations-2

Solving quadratic equations

Video: https://corbettmaths.com/2013/05/03/solving-quadratics-by-factorising/

Worksheet: https://corbettmaths.com/wp-content/uploads/2013/02/solving-quadratics-by-factorising-1-pdf.pdf

MyMaths Lesson: https://app.mymaths.co.uk/1784-lesson/quadratic-equations-1

MyMaths Homework: https://app.mymaths.co.uk/1784-homework/quadratic-equations-1

Cumulative frequency diagrams

Videos: https://corbettmaths.com/2012/08/09/drawing-cumulative-frequency-graphs/ https://corbettmaths.com/2012/08/09/reading-cumulative-frequency-graphs/

Worksheet: https://corbettmaths.com/wp-content/uploads/2021/02/Cumulative-Frequency.pdf

MyMaths Lessons:

https://app.mymaths.co.uk/362-lesson/cumulative-frequency-1 https://app.mymaths.co.uk/363-lesson/cumulative-frequency-2 MyMaths Homework:

https://app.mymaths.co.uk/362-homework/cumulative-frequency-1 https://app.mymaths.co.uk/363-homework/cumulative-frequency-2

Probability tree diagrams

Video: https://corbettmaths.com/2013/05/07/tree-diagrams/

Worksheet: https://corbettmaths.com/wp-content/uploads/2019/04/Tree-Diagrams.pdf

MyMaths Lesson: https://app.mymaths.co.uk/383-lesson/independent-probability

MyMaths Homework: https://app.mymaths.co.uk/383-homework/independent-probability

Laws of indices (including negative and fractional)

Videos: https://corbettmaths.com/2013/03/13/laws-of-indices-algebra/, https://corbettmaths.com/2013/03/03/fractional-indices/ https://corbettmaths.com/2013/03/24/negative-indices/

Worksheet: https://corbettmaths.com/wp-content/uploads/2019/02/Laws-of-Indices-174-pdf.pdf https://corbettmaths.com/wp-content/uploads/2020/07/Fractional-Indices-1.pdf https://corbettmaths.com/wp-content/uploads/2020/10/Negative-Indices.pdf

MyMaths Lessons:

https://app.mymaths.co.uk/153-lesson/indices-1 https://app.mymaths.co.uk/1785-lesson/indices-2 https://app.mymaths.co.uk/154-lesson/indices-3 MyMaths Homework:

https://app.mymaths.co.uk/153-homework/indices-1 https://app.mymaths.co.uk/1785-homework/indices-2 https://app.mymaths.co.uk/154-homework/indices-3

Graphical methods of solving equations

Video: https://corbettmaths.com/2017/12/16/solving-quadratics-graphically-advanced/

Worksheet: https://corbettmaths.com/wp-content/uploads/2019/01/Solving-Quadratics-Graphically-pdf-1.pdf

MyMaths Lesson: https://app.mymaths.co.uk/222-lesson/plotting-graphs-4-non-linear

MyMaths Homework: https://app.mymaths.co.uk/222-homework/plotting-graphs-4-non-linear

Inverse proportion

Video: https://corbettmaths.com/2013/04/04/inverse-proportion/

Worksheet: https://corbettmaths.com/wp-content/uploads/2019/03/Proportion-Direct-and-Inverse.pdf

MyMaths Lesson: https://app.mymaths.co.uk/1790-lesson/inverse-proportion

MyMaths Homework: https://app.mymaths.co.uk/1790-homework/inverse-proportion

Straight line graphs

Video: https://corbettmaths.com/2013/05/29/ymxc/

Worksheet: https://corbettmaths.com/2019/09/26/equation-of-a-line-textbook-exercise/

MyMaths Lesson: https://app.mymaths.co.uk/3270-lesson/equation-of-a-line-3

MyMaths Homework: https://app.mymaths.co.uk/3270-homework/equation-of-a-line-3

Graphical inequalities

Videos:

https://corbettmaths.com/2013/05/27/graphical-inequalities-part-1/ https://corbettmaths.com/2013/05/27/graphical-inequalities-part-2/

Worksheets: https://corbettmaths.com/wp-content/uploads/2020/02/Graphical-Inequalities-1-Textbook.pdf https://corbettmaths.com/wp-content/uploads/2013/02/graphical-inequalities-2-pdf.pdf MyMaths Lesson: https://app.mymaths.co.uk/234-lesson/shading-inequalities

MyMaths Homework: https://app.mymaths.co.uk/234-homework/shading-inequalities

Perpendicular lines

Video: https://corbettmaths.com/2013/06/06/perpendicular-lines-2/

Worksheet: https://corbettmaths.com/wp-content/uploads/2013/02/parallel-and-perpendicular-graphs-pdf.pdf

Additional worksheet: https://www.mathsgenie.co.uk/resources/perpendicularlines.pdf

Circle theorems

Videos:

https://corbettmaths.com/2013/04/04/circle-theorems-theorems/ https://corbettmaths.com/2013/04/04/circle-theorems-examples/

Worksheet: https://corbettmaths.com/wp-content/uploads/2018/09/Circle-Theorems-pdf.pdf

MyMaths Lesson: https://app.mymaths.co.uk/273-lesson/circle-theorems

MyMaths Homework: https://app.mymaths.co.uk/273-homework/circle-theorems

Surds (Rationalising the denominator)

Videos: https://corbettmaths.com/2013/05/11/rationalising-denominators/

Worksheet: https://corbettmaths.com/wp-content/uploads/2013/02/surds-pdf1.pdf

MyMaths Lesson: https://app.mymaths.co.uk/157-lesson/surds-2

MyMaths Homework: https://app.mymaths.co.uk/157-homework/surds-2

Sine Rule

Videos:

https://corbettmaths.com/2013/05/03/sine-rule-missing-sides/ https://corbettmaths.com/2019/04/24/sine-rule-angles/

Worksheet: https://corbettmaths.com/wp-content/uploads/2018/09/Sine-Rule-pdf.pdf

MyMaths Lesson: https://app.mymaths.co.uk/324-lesson/sine-rule

MyMaths Homework: https://app.mymaths.co.uk/324-homework/sine-rule

Cosine Rule

Video:

https://corbettmaths.com/2013/04/04/cosine-rule-missing-sides/ https://corbettmaths.com/2013/04/04/cosine-rule-missing-angles/

Worksheet: https://corbettmaths.com/wp-content/uploads/2019/07/Cosine-Rule-pdf.pdf

MyMaths Lessons:

https://app.mymaths.co.uk/325-lesson/cosine-rule-sides https://app.mymaths.co.uk/326-lesson/cosine-rule-angles MyMaths Homework:

https://app.mymaths.co.uk/325-homework/cosine-rule-sides https://app.mymaths.co.uk/326-homework/cosine-rule-angles Inverse and composite functions

Videos: https://corbettmaths.com/2016/08/07/inverse-functions/ https://corbettmaths.com/2016/08/07/composite-functions-2/

Worksheet: https://corbettmaths.com/wp-content/uploads/2020/05/Functions.pdf

MyMaths Lesson:

https://app.mymaths.co.uk/1779-lesson/functions-1 https://app.mymaths.co.uk/1780-lesson/functions-2 MyMaths Homework:

https://app.mymaths.co.uk/1779-homework/functions-1 https://app.mymaths.co.uk/1780-homework/functions-2

Algebraic fractions (addition and subtraction)

Video: https://corbettmaths.com/2013/01/19/adding-algebraic-fractions/

Worksheet: https://corbettmaths.com/wp-content/uploads/2013/02/adding-algebraic-fractions-pdf.pdf

MyMaths Lesson: https://app.mymaths.co.uk/177-lesson/adding-algebraic-fractions

MyMaths Homework: https://app.mymaths.co.uk/177-homework/adding-algebraic-fractions

Similar shapes (lengths, areas and volumes)

Video:

https://corbettmaths.com/2013/11/16/similar-shapes-areas/ https://corbettmaths.com/2013/11/17/similar-shape-volumes/

Worksheet: https://corbettmaths.com/wp-content/uploads/2021/10/Similar-Shapes-Area-Volume-1.pdf

MyMaths Lesson:

https://app.mymaths.co.uk/307-lesson/area-scale-factor https://app.mymaths.co.uk/308-lesson/volume-scale-factor MyMaths Homework:

https://app.mymaths.co.uk/307-homework/area-scale-factor https://app.mymaths.co.uk/308-homework/volume-scale-factor Differentiation

Video: https://corbettmaths.com/2019/06/24/differentiation/

Worksheet: https://corbettmaths.com/wp-content/uploads/2019/07/Differentiation-pdf-1.pdf

MyMaths Lesson: https://app.mymaths.co.uk/1635-lesson/differentiating-polynomials

MyMaths Homework: https://app.mymaths.co.uk/1635-homework/differentiating-polynomials

Stationary points

Video: https://corbettmaths.com/2019/12/02/stationary-points-video/

Worksheet: https://corbettmaths.com/wp-content/uploads/2019/11/Stationary-Points.pdf

MyMaths Lesson: https://app.mymaths.co.uk/1637-lesson/stationary-points

MyMaths Homework: https://app.mymaths.co.uk/1637-homework/stationary-points