| YEAR 7 | Topic | Video |
| :---: | :---: | :---: |
| Week 1 | Lesson 1: Adding and subtracting fractions Lesson 2: Multiply fractions <br> Lesson 3: Divide fractions <br> Lesson 4: Mixed numbers <br> Homework | https://hegartymaths.com/add-or-subtract-fractions-different-denominator <br> https://hegartymaths.com/multiplying-fractions-1 <br> https://hegartymaths.com/dividing-fractions <br> https://hegartymaths.com/mixed-numbers-to-improper-fractions |
| Week 2 | Lesson 1: Ratio Notation/simplifying Lesson 2: Dividing in ratio Lesson 3 - Linking fractions with ratios Lesson 4: Ratio and proportion recipes Homework | https://hegartymaths.com/simplify-ratios <br> https://hegartymaths.com/share-in-a-given-ratio-1 <br> https://hegartymaths.com/write-ratios-as-fractionsproportions <br> https://hegartymaths.com/recipe-problems-1 |
| Week 3 | Lesson 1 - Proportional reasoning <br> Lesson 2 - Best Buys <br> Lesson 3 - Best Buys <br> Lesson 4 - Consolidation <br> Homework | https://hegartymaths.com/direct-proportion-2 <br> https://hegartymaths.com/best-buys-1 <br> https://hegartymaths.com/best-buys-2 <br> https://hegartymaths.com/solve-ratio-problems-using-algebra |
| Week 4 | Lesson 1 - Describing sequences Lesson 2 - Introduction to term rule Lesson 3 - nth term Lesson 4 - Consolidation Homework | https://hegartymaths.com/geometric-sequences <br> https://hegartymaths.com/linear-sequences-term-to-term-rule <br> https://hegartymaths.com/linear-sequences-nth-term |
| Week 5 | Lesson 1 - Patterns in shapes - Sequences <br> Lesson 2 - Exploring quadratic sequences <br> Lesson 3 - Sequences from recurrence relations <br> Lesson 4 - Consolidation <br> Homework | https://hegartymaths.com/linear-sequences-from-pictures <br> https://hegartymaths.com/find-the-nth-term-of-a-quadratic-sequence <br> https://hegartymaths.com/sequences-from-recurrence-relations |
| Week 6 - | Lesson 1 - Iteration trial and improvement Lesson 2 - Simplifying linear expressions Lesson 2 - Simplifying expressions Lesson 4 - Expanding single brackets Homework | https://hegartymaths.com/trial-improvement <br> https://hegartymaths.com/simplifying-expressions-involving-multiplication <br> https://hegartymaths.com/simplifying-expressions-involving-division <br> https://hegartymaths.com/expand-a-single-bracket |
| Week 7 - | Lesson 1 - Factorise into single brackets <br> Lesson 2 - Substitution in expressions <br> Lesson 3 - Substitution into fomulae | https://hegartymaths.com/factorise-simple-expressions-1 <br> https://hegartymaths.com/substitution-1 <br> https://hegartymaths.com/substitution-2 |


| Week 8 - | Lesson 4 - Changing the subject 1 Homework | https://hegartymaths.com/change-the-subject-of-the-formula-1-1-step |
| :---: | :---: | :---: |
|  | Lesson 1 - Changing the subject 2 | https://hegartymaths.com/change-the-subject-of-the-formula-2-2-step |
|  | Lesson 2 - Iteration | https://hegartymaths.com/iteration |
|  | Lesson 3 - Expand two brackets and simplify | https://hegartymaths.com/expand-double-brackets-1 |
|  | Lesson 4 - Consolidation |  |
|  | Homework |  |
| Week 9 - | Lesson 1 - Expand double brackets | https://hegartymaths.com/expand-double-brackets-1 |
|  | Lesson 2 - Add simple algberaic fractions | https://hegartymaths.com/expressions-with-algebraic-fractions |
|  | Lesson 3 -Solving linear equations | https://hegartymaths.com/substituting-solving |
|  | Lesson 4 - Consolidation |  |
|  | Homework |  |
| Week 10 - | Lesson 1 - Plotting points linear graph (4 Quadra | https://hegartymaths.com/straight-line-graphs-1 |
|  | Lesson $2-\mathrm{y}=\mathrm{mx}+\mathrm{c}$ | https://hegartymaths.com/straight-line-graphs-5 |
|  | Lesson 3 - Gradient | https://hegartymaths.com/gradient-of-a-line-segment-1 |
|  | Lesson 4-Consolidation | https://hegartymaths.com/gradient-of-a-line-segment-4-summary |
|  | Homework |  |
| Week 11 | Lesson 1 - Gradient | https://hegartymaths.com/gradient-of-a-line-segment-2-negative |
|  | Lesson 2-Gradient of lines in $\mathrm{y}=\mathrm{mx}+\mathrm{c}$ | https://hegartymaths.com/straight-line-graphs-6 |
|  | Lesson 3 - Parallel lines | https://hegartymaths.com/straight-line-graphs-parallel |
|  | Lesson 4 - Consolidation | https://hegartymaths.com/straight-line-graphs-7 |
|  | Homework |  |
| Week 12 | Lesson 1 - Drawing real life graphs | https://hegartymaths.com/drawing-real-life-graphs |
|  | Lesson 2 - Interpreting real life graphs | https://hegartymaths.com/interpreting-real-life-graphs |
|  | Lesson 3 - Distance time graph | https://hegartymaths.com/distance-time-graphs-1 |
|  | Lesson 4 - Distance time graph | https://hegartymaths.com/distance-time-graphs-2 |
|  | Homework |  |

## ear 8

esson 1: Comparing and simplifying ratio
esson 2: Problem solving including fractions and ratio
esson 3: Proportional reasoning
range of contexts
omework:
Week 2
esson 1: Using a multiplier for \% increase and decrease esson 2: Repeated proportional change using multipliers esson 3: Discover Pythagoras' theorem Lesson 1: Use
Week 3 Lesson 1: Explore trigonometric ratios (as ratios) Lesson 2: Exact trig values
esson 3: Non calculator trigonometr
esson 4: Apply Pythagoras
Homework:
Week 4 Lesson 1. Calculate averages
Lesson 2: Problem solving with averages
Lesson 3: Frequency tables and the mean
esson 4: Grouped frequency tables the mean and modal clas omework:
Week 5 Lesson 1: Frequency polygo
esson 2: Scatter diagrams
esson 3: Identifying types of sequence and generating term esson 4: nth term of arithmetic sequences Homework:
Week 6
esson 1: Exploring quadratic sequences esson 2: Generating terms of quadratic sequence esson 3: Patterns in shapes - sequences esson 4: Expanding single brackets and collecting like term Homework:
Week 7 Lesson 1. Factorising into single brackets esson 2: Arithmetic with simple algebraic fractions esson 3: Expand 2 brackets and simplify esson 4: Iteration - trial and improvement Homework:
Week 8:
esson 1: Construct and solve linear equations
esson 2: Substitution into expressions
Lesson 3: Substitution into equations and solving
esson 4: Change the subject of formulae 1 Homework:
Week 9:
Lesson 1: Change the subject of formulae 2
lesson 2: Derive a formula and change its subject
Lesson 3: Simplify algebraic fractions
esson 4: Plot linear graph from table of values (4 quadrants) Homework:
Week 10 Lesson 1: $y=m x+c$
Lesson 3: Gradient of lines in $\mathrm{y}=\mathrm{mx}+\mathrm{c}$ form esson 4: Parallel lines
Homework:
Week 11
Lesson 1: Midpoint of line segment Lesson 2: Real life graphs - rates of change Lesson 3: Speed, distance, time esson 4: Distance time graphs Homework:

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https://hegartymaths.com/compare-quantities-using-ratios
https://hegartymaths.com/write-ratios-as-fractionsproportions https://hegartymaths.com/direct-proportion-2 https://hegartymaths.com/direct-proportion-3
https://hegartymaths.com/percentagedecimal-multipliers
https://hegartymaths.com/repeated-percentage-increase-or-decrease-1
https://hegartvmaths.com/pythagoras-theorem-proof
https://hegartymaths.com/pythagoras-longer-side
https://hegartymaths.com/trigonometry-introduction
https://hegartymaths.com/non-calculator-trigonometry-1 https://hegartymaths.com/non-calculator-trigonometry-5 https://hegartymaths.com/pythagoras-applied-1
https://hegartymaths.com/selecting-appropriate-averages
https://hegartymaths.com/averages-range-problem-solving-2
ttps://hegartymaths.com/mean-from-frequency-tables-1
https://hegartymaths.com/mean-from-frequency-tables-2
https://hegartymaths.com/frequency-polygon
https:///hegartymaths.com/scatter-diagrams-1
https:///hegartymaths.com/important-sequences
https://hegartymaths.com/linear-sequences-nth-term
https://hegartymaths.com/identify-a-quadratic-sequence https://hegartymaths.com/use-the-nth-term-of-a-quadratic-sequence-1 https://hegartymaths.com/linear-sequences-from-pictures tttps://hegartymaths.com/expand-two-single-brackets-simplify
https://hegartymaths.com/factorise-simple-expressions-2
https://hegartymaths.com/expressions-with-algebraic-fractions
ttps://hegartymaths.com/expand-double-brackets-2
https://hegartymaths.com/trial-improvement
https://hegartymaths.com/set-up-solve-equations-in-context
https://hegartymaths.com/substitution-4
httos://hegartymaths.com/substituting-solving
https://hegartymaths.com/change-the-subject-of-the-formula-2-2-step
https://hegartymaths.com/change-the-subject-of-the-formula-5-x-with-powers
https://hegartymaths.com/writing-formulae-simple-substitution
https://hegartymaths.com/simplifying-expressions-involving-division
https://hegartymaths.com/straight-line-graphs-1
https://hegartymaths.com/straight-line-graphs-2 https://hegartymaths.com/gradient-of-a-line-segment-1 https://hegartymaths.com/straight-line-graphs-4 https://hegartymaths.com/straight-line-graphs-parallel
https://hegartymaths.com/midpoint-of-a-line-segment
https://hegartymaths.com/rates-of-change-graph
https://hegartymaths.com/speed-1
https://hegartymaths.com/distance-time-graphs-3

## Video

https://hegartymaths.com/simplify-ratios
https://hegartymaths.com/inverse-proportion
https://hegartymaths.com/pythagoras-shorter-side

## https://hegartymaths.com/pythagoras-applied-1

https://hegartymaths.com/pythagoras-applied-2
https://hegartymaths.com/mode-from-frequency-tables
https://hegartymaths.com/scatter-diagrams-2


Week 12: Lesson 1: Substitution into important formulae Lesson 2: Density
esson 3: Reflection
Lesson 4: Translation Homework:
https://hegartymaths.com/rearrange-substitute-into-formulae
https://hegartymaths.com/density-1
https://hegartvmaths.com/reflections-1 tttps://hegartymaths.com/translations-2

## Lesson 2: Recognise and usereciprocals

 Lesson 3: Linking multiplying and dividing fractions with who Lesson 4: Percentage Increase/Decrease (non-calc)
## Homework

Lesson 1: Percentage Increase/Decrease (multiplier) Lesson 2: Repeated percentage change (2 videos, 2 quizzes)
esson 3: Compound interest
Lesson 4: Reverse percentage
Homework
Lesson 1: Recurring decimals to fractions
Lesson 2: Speed, (2 videos, 2 quizzes)
Lesson 3: Distance-time graphs (2 videos, 2 quizzes)
Lesson 4: Pressure (3 videos, 3 quizzes)

Homework
esson 1: Density (3 videos, 3 quizzes)

Lesson 2: Proportion using the unitary method Lesson 3: Inverse proportion worded problems Lesson 4: Speed-time graphs (2 videos, 2 quizzes)

Homework
esson 1: Pie chart problems
Lesson 2: Stem and leaf diagrams (2 videos, 2 quizzes)
esson 3: Frequency polygons
esson 4: Scatter diagrams
Homework
esson 1: Averages and range (2 videos, 2 quizzes)
esson 2: Median, mode from a frequency table (2 videos, 2
Lesson 3: Mean from a frequency table (2 videos, 2 quizzes)
Lesson 4: Stratified random sampling (2 videos, 2 quizzes)
Homework
Lesson 1: Capture recapture
Lesson 2: Quartiles and Box Plots (2 videos, 2 quizzes)
Lesson 3: Box Plots and Cumulative Frequency Diagrams
esson 4: Cumulative Frequency 2
Homework
https://www.mathspad.co.uk/tee $\quad$ https://www.tes.com/teaching-resource/reciprocal-of-in ths./hegartymaths.com/linking-multiplyingaividing-fractic https://corbettmaths.com/wp-co https://cor Algebraic: https://corbett https://corbettmaths.com/wp tps./hegartymaths.com/percentage-increase-or-decrease https://www.mathsgenie.co.uk/questions-percentage-increase-decrease.htm
Still unsure? Watch this: https://www.youtube.com/watch?v=ko3i5VFQOsi
MyMaths (1) Percentages of amounts 4 (2) Multiplying fractions
https://hegartymaths.com/percentagedecimal-multipliers https://www.mathspad.co.uk/i2/
https://hegartymaths.com/repeated-percentage-increase-or https://www.mathspad.co.uk/i2 https://hegartymaths.com/repeated-percentage-increase-or-decrease-2
https://hegartymaths.com/compound-interest
https://hegartymaths.com/reverse-percentages https://www.mathspad.co.uk/i2
MyMaths - Percentage change 2
https://hegartymaths.com/convert-recurring-decimals-to-fre https://corbettmaths.com/wp-co https://cor https://hegartymaths.com/speed-2
https://hegartymaths.com/distance-time-graphs-2
https://hegartymaths.com/distance-time-graphs-3
https://hegartymaths.com/pressure-1
https://hegartymaths.com/pressure-2
https://hegartymaths.com/pressure-3
MyMaths - Recurring decimals 2
MyMaths - Recurring decimals 2
https://hegartymaths.com/density-4 https://hegartymaths.com/density-5 https://hegartymaths.com/direct-proportion-3 https://hegartymaths.com/inverse-proportion https://hegartymaths.com/speed-time-graphs-2 https://hegartymaths.com/speed-time-graphs-5 MyMaths - Density
https://hegartymaths.com/pie-charts-3
https://hegartymaths.com/stem-leaf-diagrams-1 https://hegartymaths.com/stem-leaf-diagrams ttps://hegartymaths.com/frequency-polygon
https://hegartymaths.com/scatter-diagrams-2
MyMaths - (1) Frequency Polygons (2) Stem and leaf diagrams

Ex F page 8-9https://www.maths
Ex C page 5-6https://www.maths
https://corbettmaths.com/wp-co https://corbettmaths.com/wp-content/uploads/2019/08/Pressure.pdf
https://corbettmaths.com/wp-co https://cor https://hegartymaths.com/density-2
https://corbettmaths.com/wp-co https://co
Ex E page 9-10https://www.math
What distance has been travelled? (Mix of DT VT graph questions)https://www.mathspad.co.uk/teac
https://hegartymaths.com/averages-range-problem-solving-1
https://hegartymaths.com/averages-range-problem-solving-2
https://hegartymaths.com/averages-range-problem-solv
.
https://hegartymaths.com/median-from-frequency-tables
https://hegartymaths.com/mean-from-frequency-tables-1
https://hegartymaths.com/mean-from-frequency-tables-2
https://hegartymaths.com/stratified-random-sampling-1
https://hegartymaths.com/stratified-random-sampling-2
MyMaths - (1) Median, mode from freq table (2) Mean from freq table
https://hegartymaths.com/capture-recapture-1
https://hegartymaths.com/upper-lower-quartiles
https://hegartymaths.com/box-plots-1
https://hegartymaths.com/box-plots-2
https://hegartymaths.com/cumulative-frequency-diagrams-1
https://hegartymaths.com/cumulative-frequency-diagrams-2
MyMaths - Box and whisker plots
https://hegartymaths.com/scale-diagrams-1
https://hegartymaths.com/scale-diagrams-2

|  | Lesson 2: Bearings (2 videos, 2 quizzes) | https://hegartymaths.com/bearings-1 https://hegartymaths.com/bearings-2 |
| :---: | :---: | :---: |
|  | Lesson 3: Bearings continued (2 videos, 2 quizzes) | https://hegartymaths.com/bearings-3 |
|  |  | https://hegartymaths.com/bearings-4 |
|  | Lesson 4: Circle theorems 1 (Angle at centre) | https://hegartymaths.com/circle-theorem-1 |
|  | Homework | MyMaths - Scale drawings |
| Week 9 | Lesson 1: Circle theorems 2 (Angle in a semi-circle) | https://hegartymaths.com/circle-theorem-2 |
|  | Lesson 2: Circle theorems 3 (Angles in the same segment) | https://hegartymaths.com/circle-theorem-3 Consolidation of first three theorems: https ://www.mathspad.co.uk/teach/worksheets/circleTheorem |
|  | Lesson 3: Congruent triangles | https://hegartymaths.com/congruent-triangles |
|  | Lesson 4: Congruent triangles problems | https://hegartymaths.com/congruent-triangles-problem-solving-1 |
|  | Homework | MyMaths - Bearings |
| Week 10 | Lesson 1: Similar shapes (2 videos, 2 quizzes) | https://hegartymaths.com/similar-polygons-2 |
|  |  | https://hegartymaths.com/similar-shapes-problem-solving |
|  | Lesson 2: Vectors and scalars (2 videos, 2 quizzes) | https://hegartymaths.com/vectors-1-vectors-scalars |
|  |  | https://hegartymaths.com/vectors-2-column-vectors |
|  | Lesson 3: Adding and subtracting vectors | https://hegartymaths.com/vectors-3-negative-vectors |
|  |  | https://hegartymaths.com/vectors-4-combining-vectors |
|  | Lesson 4: Multiplying vectors by scalars | https://hegartymaths.com/vectors-5-multiplying-bv-scalars |
|  | Homework | MyMaths - Vectors 1 |
| Week 11 | Lesson 1: Symmetry (2 videos, 2 quizzes) | https://hegartymaths.com/line-symmetry |
|  |  | https://hegartymaths.com/rotational-symmetry |
|  | Lesson 2: Translations (2 videos, 2 quizzes) | https://hegartymaths.com/translations-1 |
|  |  | https://hegartymaths.com/translations-2 |
|  | Lesson 3: Reflections (vertical and horizontal) | https://hegartymaths.com/reflections-1 |
|  | Lesson 4: Reflections (diagonal) | https://hegartymaths.com/reflections-2 |
|  | Homework | MyMaths - Translating and reflecting |
| Week 12 | Lesson 1: Rotations (2 videos, 2 quizzes) | https://hegartymaths.com/rotations-1 |
|  |  | https://hegartvmaths.com/rotations-2 |
|  | Lesson 2: Enlargements (2 videos, 2 quizzes) | https://hegartymaths.com/enlargements-1 |
|  |  | https://hegartymaths.com/enlargements-2 |
|  | Lesson 3: Enlargements ctd (fractional scale factor) (2 vid | https://hegartymaths.com/enlargements-3 |
|  |  | https://hegartymaths.com/enlargements-4 |
|  | Lesson 4: Enlargements (negative scale factor) | https://hegartymaths.com/enlargements-5 |

Lesson 1: Reciprocals

Lesson 2: Multiplying big number ividing big numbers Lesson 4: Multiply fractionsthe://hegartymaths.com/division-using-steps Homework MyMaths - Multiplying fractions
httoco /heartumatho

Lesson 2: Linking multiplying and dividing fractions wi https:///hegartymaths.com/linking-multiplyingdividing-fractions-whole-numbers Lesson 3: Percentage increase/decrease (non-calc) https://hegartymaths.com/percentage-increase-or-decrease Lesson 4: Percentage increase/decrease (multipliers) https://hegartymaths.com/percentagedecimal-multipliers Homework
Lesson 1: Compound interest
Lesson 2: Reverse percentages
Lesson 3: Speed (2 videos, 2 quizzes)
Lesson 4: Distance-time graphs
Homework
Lesson 1: Pressure (2 videos, 2 quizzes)
Lesson 2: Density (2 videos, 2 quizzes)
Lesson 3: Conversion Graphs
Lesson 4: Real life graphs
Homework
Lesson 2: Bar charts and pictograms (2 videos, 2 quizz https://hegartymaths.com/bar-charts-vertical-line-graphs
Lesson 3: Pie charts
Lesson 4: Stem and leaf diagrams ( 2 videos, 2 quizees) https://hegartvmaths.com/stem-leaf-diagrams-1
Homework
Lesson 1: Frequency polygons
Lesson 2: Scatter diagrams
Lesson 3: Interpolation and extrapolation
Lesson 4: Selecting averages
Homework
Lesson 1: Median, mode from a frequency table (2 vis
Lesson 2: Mean from a frequency table (2 videos, 2 a
Lesson 3: Scale diagrams
Lesson 4: Scale diagrams continued
Homework
Lesson 1: Bearings
Lesson 2: Bearing
Lesson 3: Bearings
Lesson 4: Congruent triangles
Homework
https://hegartymaths.com/direct-proportion-3 https://hegartymaths.com/pictograms
MyMaths - Percentage change 1
MyMaths - Percentage change 1
https://hegartymaths.com/compound-interest https://hegartymaths.com/reverse-percentages https://hegartymaths.com/speed-1 https://hegartymaths.com/speed-2
MyMaths - Reverse percentages
https://hegartymaths.com/pressure-1 https://hegartymaths.com/pressure-2 https://hegartymaths.com/density-1 https://hegartymaths.com/density-4 https://hegartymaths.com/conversion-graphs-2 https://hegartymaths.com/interpreting-real-life-graphs MyMaths - Real life graphs
https://hegartymaths.com/stem-leaf-diagrams-1 Mytps://hegartymaths.com/stem-leaf-diagrams-3 https://hegartymaths.com/frequency-polygons https://hegartymaths.com/scatter-diagrams-1 https://hegartymaths.com/scatter-diagrams-2 https://hegartymaths.com/selecting-appropriate-averages MyMaths - (1) Frequency Polygons (2) Line of best fit https://hegartymaths.com/mode-from-frequency-tables https://hegartymaths.com/median-from-frequency-tables $\frac{\mathrm{https}: / / / \text { hegartymaths.com/mean-from-frequency-tables-1 }}{\mathrm{h} \text { https } / / / \mathrm{hegarttmmaths}}$ https://hegartymaths.com/mean-from-frequency-tables-2 https://hegartymaths.com/scale-diagrams-1 https://hegartymaths.com/scale-diagrams-2 MyMaths - (1) Median, mode from freq table (2) Mean from freq table https://hegartymaths.com/bearings-1
htps.//hegartymaths.com/bearnss-2
https./hegarymahs.com/bearnss-3
MyMaths - Bearings
https://hegartymaths.com/similar-triangles-1 https://hegartymaths.com/similar-polygons-2 tps://heart res , MyMaths - Similar triangles
https:// hegartymaths com/vectors-4-combining-vectors https://hegartymaths.com/translations-1

Ex E page 7:https://www.mathspad.co.uk/i2/teachPrint.php?id=timeAndSpeedFoundation\&r=Booklet

|  |  | https://hegartymaths.com/translations-2 |
| :---: | :---: | :---: |
|  | Lesson 3: Line symmetry | https://hegartymaths.com/line-symmetry |
|  | Lesson 4: Rotational symmetry | https://hegartymaths.com/rotational-symmetry |
|  | Homework | MyMaths (1) Rotational Symmetry (2) Translating shapes |
| Week 11 | Lesson 1: Reflections (vertical and horizontal) | https://hegartymaths.com/reflections-1 |
|  | Lesson 2: Reflections (diagonal) | https://hegartymaths.com/reflections-2 |
|  | Lesson 3: Rotations (about origin) | https://hegartymaths.com/rotations-1 |
|  | Lesson 4: Rotations (about any point) | https://hegartymaths.com/rotations-2 |
|  | Homework | MyMaths - (1) Reflecting shapes (2) Rotating shapes |
| Week 12 | Lesson 1: Enlargements | https://hegartymaths.com/enlargements-1 |
|  | Lesson 2: Englargements (Fractional scale factor) | https://hegartvmaths.com/enlargements-3 |
|  | Lesson 3: Combined transformations | https://hegartymaths.com/combined-transformations-1 |
|  | Lesson 4: Combined transformations 2 | https://hegartymaths.com/combined-transformation |



Week 12 Lesson 1: Enaragement
Lesson 2: S Similar Shapes
Lesson 3: Vectors- Column
Lesson 4 : vecors










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