

Year 11 Maths Oak Academy Work Half Term 2

FOUNDATION

Catch Up Unit 1	
Metric Conversions	https://classroom.thenational.academy/lessons/solving-problems-using-measures-69j32t
Perimeter	https://classroom.thenational.academy/lessons/perimeter-of-polygons-and-compound-shapes-65k3jt
Area of rectangle, triangle, parallelogram, trapezium	https://classroom.thenational.academy/lessons/area-of-rectangles-parallelograms-and-triangles-71jp8c https://classroom.thenational.academy/lessons/area-of-a-trapezium-70r34c
Area and circumference of circles	https://classroom.thenational.academy/lessons/find-the-circumference-of-a-circle-c4tp6e https://classroom.thenational.academy/lessons/find-the-area-of-a-circle-60w36c
Area of compound shapes	https://classroom.thenational.academy/lessons/area-of-compound-shapes-65k64c
Volume of a cuboid, prism	https://classroom.thenational.academy/lessons/volume-of-cubes-and-cuboids-6hhk6r https://classroom.thenational.academy/lessons/finding-the-volume-of-triangular-prisms-6cukgd

Catch Up Unit 2	
Translations	https://classroom.thenational.academy/lessons/translate-and-describe-an-object-given-a-horizontal-or-vertical-instruction-6hgket https://classroom.thenational.academy/lessons/translate-and-describe-a-2d-vector-65k3cr https://classroom.thenational.academy/lessons/represent-a-column-vector-as-a-diagram-and-using-notation-c8vp4t https://classroom.thenational.academy/lessons/write-a-column-vector-from-a-diagram-74tkce

Year 11 Maths Oak Academy Work Half Term 2

Rotations	https://classroom.thenational.academy/lessons/rotate-an-object-around-a-given-point-71j36c https://classroom.thenational.academy/lessons/rotate-an-object-around-a-given-coordinate-6gr66r
Reflections	https://classroom.thenational.academy/lessons/reflecting-in-a-given-horizontal-or-vertical-line-part-1-6mv64d https://classroom.thenational.academy/lessons/reflecting-in-a-given-horizontal-or-vertical-line-part-2-cgvkad https://classroom.thenational.academy/lessons/reflecting-in-a-given-diagonal-line-part-1-c4w32t https://classroom.thenational.academy/lessons/reflecting-in-a-given-diagonal-line-part-2-c9k64r
Enlargements	https://classroom.thenational.academy/lessons/enlarge-an-object-with-a-positive-scale-factor-c4v3gc https://classroom.thenational.academy/lessons/enlarge-an-object-with-a-positive-scale-factor-from-a-given-coordinate-6rup8d

Catch Up Unit 3

Bar charts, pictograms and vertical line charts	https://classroom.thenational.academy/lessons/bar-charts-6hh3gr https://classroom.thenational.academy/lessons/pictograms-60up8t
Drawing and interpreting scatter graphs-include causation/correlation	https://classroom.thenational.academy/lessons/plot-a-scatter-graph-and-describe-correlation-6nh6ce https://classroom.thenational.academy/lessons/use-a-line-of-best-fit-on-a-scatter-graph-crv32d
Pie charts	https://classroom.thenational.academy/lessons/draw-and-interpret-pie-charts-cmt36t

Year 11 Maths Oak Academy Work Half Term 2

Catch Up Unit 4	
Simple probability	https://classroom.thenational.academy/lessons/use-the-language-of-probability-and-the-probability-scale-6mu6cd https://classroom.thenational.academy/lessons/calculate-probabilities-from-equally-likely-events-6nj3ad
Mutually exclusive events	https://classroom.thenational.academy/lessons/find-the-probability-of-an-event-not-happening-including-using-a-table-include-mutually-exclusive-and-exhaustive-crvkgd
Relative Frequency	https://classroom.thenational.academy/lessons/calculate-experimental-probabilities-and-make-predictions-relative-frequency-64rk8r
Frequency and Two way tables	https://classroom.thenational.academy/lessons/list-outcomes-in-a-sample-space-diagram-two-way-table-and-calculate-probabilities-64u68r
Frequency Trees	https://classroom.thenational.academy/lessons/find-probabilities-from-frequency-trees-ccukad

FA1	
Simplifying expressions	https://classroom.thenational.academy/lessons/collecting-like-terms-6tgk8r
Simplifying indices	https://classroom.thenational.academy/lessons/multiply-powers-c5jk4e https://classroom.thenational.academy/lessons/divide-powers-6wt36t
Expanding single brackets	https://classroom.thenational.academy/lessons/expand-2-brackets-and-simplify-expressions-part-1-crvk4c
Factorising single brackets	https://classroom.thenational.academy/lessons/factorising-single-brackets-70rkgr https://classroom.thenational.academy/lessons/factorising-single-brackets-factor-out-a-letter-64wk0c https://classroom.thenational.academy/lessons/factorise-single-brackets-factor-a-number-and-a-letter-6crked https://classroom.thenational.academy/lessons/factorising-single-brackets-more-complicated-expressions-c8tk2t

Year 11 Maths Oak Academy Work Half Term 2

Expand and simplify double brackets	https://classroom.thenational.academy/lessons/expand-and-simplify-double-brackets-cdhkjc
Factorising double brackets	https://classroom.thenational.academy/lessons/factorise-a-quadratic-cgukjt
The difference of two squares	https://classroom.thenational.academy/lessons/factorise-a-quadratic-difference-of-two-squares-71jpac

FA2	
Using function machines	https://classroom.thenational.academy/lessons/calculations-with-variables-6dj64t
Solving equations	https://classroom.thenational.academy/lessons/solving-one-step-equations-chk32d https://classroom.thenational.academy/lessons/solving-two-step-equations-60tk8d https://classroom.thenational.academy/lessons/solving-equations-with-brackets-6rt3ec https://classroom.thenational.academy/lessons/solving-equations-with-unknown-on-both-sides-6xgkar
Forming equations	https://classroom.thenational.academy/lessons/forming-and-exploring-equations-70r3gr
Solving linear inequalities	https://classroom.thenational.academy/lessons/solve-one-and-two-step-inequalities-chj3jr
Changing the subject of a formula	https://classroom.thenational.academy/lessons/change-the-subject-of-a-formula-6hhp2t
Substitution	https://classroom.thenational.academy/lessons/substitute-a-positive-term-into-a-formula-cdgkge https://classroom.thenational.academy/lessons/substitute-a-negative-term-into-a-formula-75j3cc
Generating a sequence	https://classroom.thenational.academy/lessons/growing-pattern-sequences-70w32t
Finding the nth term of linear sequences	https://classroom.thenational.academy/lessons/write-the-nth-term-of-a-linear-sequence-70w62d
Recognise and use fibonacci and geometric sequences	https://classroom.thenational.academy/lessons/triangular-and-fibonacci-style-sequences-69gk8d

Year 11 Maths Oak Academy Work Half Term 2

FA3	
Drawing quadratic graphs	https://classroom.thenational.academy/lessons/plot-simple-quadratic-equations-6gr32e
Solving quadratic equations by factorisation	https://classroom.thenational.academy/lessons/solve-a-quadratic-equation-by-factorising-cn36c
Roots and Turning Points	https://classroom.thenational.academy/lessons/identify-and-interpret-roots-intercepts-and-turning-points-of-quadratic-graphs-c4uk8d
Sketching quadratic graphs	https://classroom.thenational.academy/lessons/plot-other-quadratic-equations-65h3ed
Simultaneous linear equations	https://classroom.thenational.academy/lessons/solve-linear-simultaneous-equations-where-one-of-the-coefficients-is-equal-75k64r https://classroom.thenational.academy/lessons/solve-linear-simultaneous-equations-where-you-need-to-multiply-one-of-the-equations-6nh64t
Solving worded simultaneous linear equations	https://classroom.thenational.academy/lessons/solving-word-problems-c5j36e
FA4	
Solve coordinate problems	https://classroom.thenational.academy/lessons/solving-geometric-problems-6rr68d
Drawing straight line graphs from a table	https://classroom.thenational.academy/lessons/draw-graphs-of-the-form-ymxc-by-using-a-table-of-values-cn68c
Understanding $y=mx+c$	https://classroom.thenational.academy/lessons/find-the-equation-of-a-straight-line-using-ymxc-60u3gr
Drawing straight line graphs from $y=mx+c$	https://classroom.thenational.academy/lessons/find-the-intercept-and-gradient-from-a-line-given-in-any-form-6mrk8c
Gradients of lines including identifying parallel lines	https://classroom.thenational.academy/lessons/find-the-gradient-of-a-line-60wkjd https://classroom.thenational.academy/lessons/using-gradient-to-solve-problems-with-parallel-lines-cgr36c

Year 11 Maths Oak Academy Work Half Term 2

Finding the equation of a straight line	https://classroom.thenational.academy/lessons/draw-graphs-of-the-form-axby-c-by-using-a-table-of-values-71k68t
Solving simultaneous equations graphically	https://classroom.thenational.academy/lessons/use-graphs-to-solve-simple-equations-including-simultaneous-equations-6rv3gd
Draw and recognise graphs of simple cubic and reciprocal functions	https://classroom.thenational.academy/lessons/draw-graphs-of-simple-cubic-functions-using-a-table-of-values-cnk36d https://classroom.thenational.academy/lessons/recognise-draw-sketch-and-interpret-graphs-of-the-reciprocal-function-y-1x-cct30d
Speed Distance Time Recap	https://classroom.thenational.academy/lessons/calculating-speed-distance-and-time-6mrkje
Distance-time graphs	https://classroom.thenational.academy/lessons/distance-time-graphs-c9hpar
Real-life Graphs, Conversion Graphs	https://classroom.thenational.academy/lessons/exchange-rates-with-graphs-6cv36d

HIGHER

Catch up Unit 1	
Area of rectangle, triangle, parallelogram, trapezium	https://classroom.thenational.academy/lessons/area-of-rectangles-parallelograms-and-triangles-71jp8c https://classroom.thenational.academy/lessons/area-of-a-trapezium-70r34c
Area of compound shapes	https://classroom.thenational.academy/lessons/area-of-compound-shapes-65k64c https://classroom.thenational.academy/lessons/calculate-area-of-compound-shapes-with-circles-68r34d
Area and circumference of circles including answers in terms of Pi	https://classroom.thenational.academy/lessons/find-the-circumference-of-a-circle-c4tp6e https://classroom.thenational.academy/lessons/find-the-area-of-a-circle-60w36c

Year 11 Maths Oak Academy Work Half Term 2

Area and perimeter of sectors	https://classroom.thenational.academy/lessons/find-the-area-of-a-sector-c9j66t https://classroom.thenational.academy/lessons/find-the-radius-or-diameter-given-the-area-of-a-sector-crupad https://classroom.thenational.academy/lessons/find-the-length-of-an-arc-on-a-semicircle-and-quarter-circle-and-the-perimeter-of-a-semicircle-and-quarter-circle-6mup4d https://classroom.thenational.academy/lessons/find-the-length-of-an-arc-and-the-perimeter-of-a-sector-6xj34c https://classroom.thenational.academy/lessons/use-the-arc-length-to-find-the-radius-or-angle-of-a-sector-70wk8r
Surface area of prisms	https://classroom.thenational.academy/lessons/finding-the-surface-area-of-triangular-prisms-6dh3ae
Volume of a cuboid, prism	https://classroom.thenational.academy/lessons/volume-of-cubes-and-cuboids-6hhk6r https://classroom.thenational.academy/lessons/finding-the-volume-of-triangular-prisms-6cukgd
Surface area and volume of Spheres, Pyramids, Cones	https://classroom.thenational.academy/lessons/volume-and-surface-area-of-a-pyramid-ccr6ct https://classroom.thenational.academy/lessons/volume-and-surface-area-of-a-cone-70v68t https://classroom.thenational.academy/lessons/volume-and-surface-area-of-a-sphere-6rvp6t

Catch up Unit 2

Translations	https://classroom.thenational.academy/lessons/translate-and-describe-an-object-given-a-horizontal-or-vertical-instruction-6hgket https://classroom.thenational.academy/lessons/translate-and-describe-a-2d-vector-65k3cr https://classroom.thenational.academy/lessons/represent-a-column-vector-as-a-diagram-and-using-notation-c8vp4t
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Year 11 Maths Oak Academy Work Half Term 2

	https://classroom.thenational.academy/lessons/write-a-column-vector-from-a-diagram-74tkce
Rotations	https://classroom.thenational.academy/lessons/rotate-an-object-around-a-given-point-71j36c https://classroom.thenational.academy/lessons/rotate-an-object-around-a-given-coordinate-6gr66r
Reflections	https://classroom.thenational.academy/lessons/reflecting-in-a-given-horizontal-or-vertical-line-part-1-6mv64d https://classroom.thenational.academy/lessons/reflecting-in-a-given-horizontal-or-vertical-line-part-2-cgvkad https://classroom.thenational.academy/lessons/reflecting-in-a-given-diagonal-line-part-1-c4w32t https://classroom.thenational.academy/lessons/reflecting-in-a-given-diagonal-line-part-2-c9k64r
Enlargements	https://classroom.thenational.academy/lessons/enlarge-an-object-with-a-positive-scale-factor-c4v3gc https://classroom.thenational.academy/lessons/enlarge-an-object-with-a-positive-scale-factor-from-a-given-coordinate-6rup8d
Similar shapes	https://classroom.thenational.academy/lessons/find-missing-lengths-in-similar-separate-shapes-6wvk8c https://classroom.thenational.academy/lessons/find-missing-lengths-in-similar-shapes-which-have-sides-overlapping-ctjkac
Similar shapes- area and volume scale factor problems	https://classroom.thenational.academy/lessons/find-areas-of-similar-shapes-given-corresponding-lengths-ccr6ae https://classroom.thenational.academy/lessons/find-volumes-of-similar-shapes-given-corresponding-lengths-70ukgt

Year 11 Maths Oak Academy Work Half Term 2

Pythagoras' theorem	https://classroom.thenational.academy/lessons/find-the-length-of-the-hypotenuse-6xgk6t https://classroom.thenational.academy/lessons/find-the-length-of-the-shorter-side-6ru6ce
Pythagoras in 3D	http://corbettmaths.com/2012/08/19/3d-pythagoras/
Trigonometry - SOH CAH TOA	https://classroom.thenational.academy/lessons/use-tangent-to-find-a-length-c5gkge https://classroom.thenational.academy/lessons/use-sine-and-cosine-to-find-a-length-75hk0c https://classroom.thenational.academy/lessons/solve-basic-trigonometry-equations-6cup6r
Trigonometry in 3D	http://corbettmaths.com/2013/12/07/3d-trigonometry/
Sine and cosine rules	http://corbettmaths.com/2013/05/03/sine-rule-missing-sides/ https://corbettmaths.com/2019/04/24/sine-rule-angles/ http://corbettmaths.com/2013/04/04/cosine-rule-missing-sides/
Areas of triangles using $\frac{1}{2}ab\sin C$	http://corbettmaths.com/2012/08/02/area-of-a-triangle-sinetrigonometry/

Catch up Unit 4

Cumulative frequency	https://classroom.thenational.academy/lessons/plot-a-cumulative-frequency-diagram-6cw34r https://classroom.thenational.academy/lessons/find-quartiles-and-interquartile-range-from-cf-diagram-cmw3at
Box plots	https://classroom.thenational.academy/lessons/plot-a-box-plot-and-compare-distributions-cgrk2t
Drawing Histograms	https://classroom.thenational.academy/lessons/plot-a-histogram-60vk8e
Interpreting frequencies from a histogram	https://classroom.thenational.academy/lessons/find-frequency-from-a-histogram-6tk30r

Catch up Unit 5

Year 11 Maths Oak Academy Work Half Term 2

Simple probability	https://classroom.thenational.academy/lessons/use-the-language-of-probability-and-the-probability-scale-6mu6cd https://classroom.thenational.academy/lessons/calculate-probabilities-from-equally-likely-events-6nj3ad
Mutually exclusive events	https://classroom.thenational.academy/lessons/find-the-probability-of-an-event-not-happening-including-using-a-table-include-mutually-exclusive-and-exhaustive-crvkgd
Relative Frequency	https://classroom.thenational.academy/lessons/calculate-experimental-probabilities-and-make-predictions-relative-frequency-64rk8r
Probability trees with replacement	https://classroom.thenational.academy/lessons/draw-a-tree-diagram-for-independent-events-c8v3ge https://classroom.thenational.academy/lessons/calculate-probabilities-of-independent-events-6mw3jr
Probability trees without replacement	https://classroom.thenational.academy/lessons/draw-a-tree-diagram-for-dependent-events-6thpar https://classroom.thenational.academy/lessons/calculate-probabilities-of-dependent-events-69k32t
Conditional Probability	https://classroom.thenational.academy/lessons/conditional-probability-word-problems-cgwkec https://classroom.thenational.academy/lessons/conditional-probability-from-a-two-way-table-74t66t

HA1	
Expand and simplify algebraic expressions including double and triple brackets	https://classroom.thenational.academy/lessons/expand-2-brackets-and-simplify-expressions-part-1-crvk4c https://classroom.thenational.academy/lessons/expand-and-simplify-double-brackets-cdhkjc https://classroom.thenational.academy/lessons/expand-product-of-more-than-two-binomials-cmw38d

Year 11 Maths Oak Academy Work Half Term 2

Factorising including quadratic	https://classroom.thenational.academy/lessons/factorise-single-brackets-factor-a-number-and-a-letter-6crked https://classroom.thenational.academy/lessons/factorise-a-quadratic-cgukjt
Factorise Quadratics including $ax^2 + bx + c$	https://classroom.thenational.academy/lessons/factorise-a-quadratic-higher-cckac
Simplifying algebraic fractions	https://classroom.thenational.academy/lessons/write-the-sum-of-two-algebraic-fractions-where-the-denominator-is-an-expression-6ru3ac
Solving linear equations	https://classroom.thenational.academy/lessons/solving-equations-with-unknown-on-both-sides-6xgkar
Forming equations	https://classroom.thenational.academy/lessons/forming-and-exploring-equations-70r3gr
Solving linear inequalities	https://classroom.thenational.academy/lessons/solve-one-and-two-step-inequalities-chj3jr
Represent the solution set on a number line, using set notation and on a graph	https://classroom.thenational.academy/lessons/representing-inequalities-on-a-number-line-6cuk6t https://classroom.thenational.academy/lessons/represent-inequalities-on-a-coordinate-grid-1-65hk2r
Solve equations involving algebraic fractions - linear	https://classroom.thenational.academy/lessons/solve-algebraic-fraction-equations-c5j6cd
Solving equations from ratio problems	N/A
Changing the subject of a formula	https://classroom.thenational.academy/lessons/change-the-subject-of-a-formula-6hhp2t
Rearranging formulae with factorising	https://classroom.thenational.academy/lessons/change-the-subject-where-the-unknown-appears-twice-in-an-algebraic-fraction-c5j6cd

HA2

Substitution	https://classroom.thenational.academy/lessons/substitute-a-positive-term-into-a-formula-cdgkge
Using an iterative formula	https://classroom.thenational.academy/lessons/solve-equations-numerically-solving-equations-using-iteration-c5h6cr

Year 11 Maths Oak Academy Work Half Term 2

Rearranging to an iterative formula	https://classroom.thenational.academy/lessons/solve-equations-numerically-rearrange-to-form-iterative-formulae-6xgp4c
Using the method of 'change of sign' to find regions for roots	https://classroom.thenational.academy/lessons/solve-equations-numerically-change-of-sign-cmr30c
Identifying and using sequences - Fibonacci /Geometric/Quadratic	https://classroom.thenational.academy/lessons/triangular-and-fibonacci-style-sequences-69gk8d
Finding the nth term of linear sequences	https://classroom.thenational.academy/lessons/write-the-nth-term-of-a-linear-sequence-70w62d
Finding the nth term of quadratic sequences	https://classroom.thenational.academy/lessons/find-the-nth-term-of-a-quadratic-sequence-6xgp8c
Algebraic proof involving odd, even, consecutive numbers, and divisibility	https://classroom.thenational.academy/lessons/prove-by-counter-example-cdk3cc https://classroom.thenational.academy/lessons/prove-an-expression-will-be-a-multiple-of-a-given-number-6tjket https://classroom.thenational.academy/lessons/consecutive-number-proofs-cnk6ae https://classroom.thenational.academy/lessons/odd-and-even-number-proofs-c5k34t

HA3	
Drawing quadratic graphs	https://classroom.thenational.academy/lessons/plot-simple-quadratic-equations-6gr32e
Solving quadratic equations by factorisation	https://classroom.thenational.academy/lessons/solve-a-quadratic-equation-by-factorising-cnk36c
The difference of two squares	https://classroom.thenational.academy/lessons/factorise-a-quadratic-difference-of-two-squares-71jpac
Roots and Turning Points	https://classroom.thenational.academy/lessons/identify-and-interpret-roots-intercepts-and-turning-points-of-quadratic-graphs-c4uk8d
Sketching quadratic graphs	https://classroom.thenational.academy/lessons/plot-other-quadratic-equations-65h3ed

Year 11 Maths Oak Academy Work Half Term 2

Use graphs to solve equations	https://classroom.thenational.academy/lessons/solving-quadratic-equations-graphically-6cr6ad
Solving quadratic equations - Formula	https://classroom.thenational.academy/lessons/use-formulae-to-solve-quadratic-equations-any-value-70vkae
Complete the Square and solving	https://classroom.thenational.academy/lessons/complete-the-square-a-1-69h3at https://classroom.thenational.academy/lessons/solve-quadratic-equations-by-completing-the-square-64rpct
Proof of a quadratic expression always being positive	See algebraic proof in HA2
Solving algebraic fraction equations resulting in a quadratic	https://classroom.thenational.academy/lessons/solve-algebraic-fraction-equations-involving-addition-or-subtraction-6xj32r
Quadratic inequalities	https://classroom.thenational.academy/lessons/solve-quadratic-inequalities-a-1-c9h3gr
Matching coefficients in identities	n/a
Simultaneous linear equations	https://classroom.thenational.academy/lessons/solve-linear-simultaneous-equations-where-you-need-to-multiply-one-of-the-equations-6nh64t
Simultaneous equations with a quadratic	https://classroom.thenational.academy/lessons/solve-where-and-setting-the-equations-equal-to-one-another-chk66d https://classroom.thenational.academy/lessons/solve-where-and-substituting-74v64t https://classroom.thenational.academy/lessons/solve-where-xy-a-and-y-2x-1-substituting-6rukec

HA4

Drawing straight line graphs from a table	https://classroom.thenational.academy/lessons/draw-graphs-of-the-form-ymxc-by-using-a-table-of-values-cnk68c
Understanding $y=mx+c$	https://classroom.thenational.academy/lessons/find-the-equation-of-a-straight-line-using-ymxc-60u3gr

Year 11 Maths Oak Academy Work Half Term 2

Drawing straight line graphs from $y=mx+c$	https://classroom.thenational.academy/lessons/find-the-intercept-and-gradient-from-a-line-given-in-any-form-6mrk8c
Gradients of lines	https://classroom.thenational.academy/lessons/find-the-gradient-of-a-line-60wkjd
Finding the equation of a straight line	https://classroom.thenational.academy/lessons/draw-graphs-of-the-form-axby-c-by-using-a-table-of-values-71k68t
Rearranging $ax + by + c = 0$ into $y=mx+c$	https://classroom.thenational.academy/lessons/find-the-intercept-and-gradient-from-a-line-given-in-any-form-6mrk8c
Parallel and perpendicular gradients	https://classroom.thenational.academy/lessons/using-gradient-to-solve-problems-with-parallel-lines-cgr36c https://classroom.thenational.academy/lessons/work-out-gradient-of-line-perpendicular-to-a-given-line-cdk6ar https://classroom.thenational.academy/lessons/work-out-equation-of-the-line-perpendicular-that-passes-through-a-given-point-6djp4r
Graphing straight line inequalities and finding regions	https://classroom.thenational.academy/lessons/shade-in-the-region-defined-by-several-inequalities-75h68t
Solving simultaneous equations graphically	https://classroom.thenational.academy/lessons/use-graphs-to-solve-simple-equations-including-simultaneous-equations-6rv3gd
Speed Distance Time Recap	https://classroom.thenational.academy/lessons/calculating-speed-distance-and-time-6mrkje
Distance-time graphs	https://classroom.thenational.academy/lessons/distance-time-graphs-c9hpar https://classroom.thenational.academy/lessons/calculate-speed-from-distance-time-graphs-crw38d
Velocity-time graphs	https://classroom.thenational.academy/lessons/velocity-time-graphs-6hjket https://classroom.thenational.academy/lessons/acceleration-from-a-velocity-time-graph-c8v3cr
Function Notation	https://classroom.thenational.academy/lessons/find-a-particular-value-of-fx-cw6d https://classroom.thenational.academy/lessons/solve-equations-using-fx-71jk0c

Year 11 Maths Oak Academy Work Half Term 2

Inverse Functions	https://classroom.thenational.academy/lessons/find-inverse-functions-75k68t
Composite Functions	https://classroom.thenational.academy/lessons/composite-functions-crr30d

HA5	
Graphs of cubic, exponential and reciprocal functions	https://classroom.thenational.academy/lessons/draw-graphs-of-simple-cubic-functions-using-a-table-of-values-cnk36d
	https://classroom.thenational.academy/lessons/recognise-draw-sketch-and-interpret-graphs-of-the-reciprocal-function-y-1x-cct30d
Using real life graphs such as growth/decay, conversion graphs	https://classroom.thenational.academy/lessons/exchange-rates-with-graphs-6cv36d
Equation of circle with centre (0,0)	https://classroom.thenational.academy/lessons/draw-and-recognise-circle-graphs-of-the-form-x-y-r-cguk6t
Equation of a tangent to a circle	https://classroom.thenational.academy/lessons/find-the-equation-of-a-tangent-to-a-circle-at-a-given-point-6tk68t
Transformation of functions $y = f(x) + a$, $y = f(x+a)$, $y = -f(x)$, $y = f(-x)$ ONLY	N/A
Graphs of trigonometric functions	N/A
Gradients as a rate of change (not differentiation)	https://classroom.thenational.academy/lessons/estimate-and-interpret-the-gradient-of-a-curve-c5gk8r
Calculate or estimate the area under a graph (not integration)	https://classroom.thenational.academy/lessons/find-the-area-under-a-straight-line-6nhkee https://classroom.thenational.academy/lessons/estimate-the-area-under-a-curve-cct3ar