

Curriculum Map 2020-21

- Interleaving Opportunities

Subject Maths

| | | Term 1 | Term 2 | Term 3 | Term 4 | Term 5 | Term 6 |
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| Year 12 A Level Maths | Assessment task(s)/title(s) | <ul style="list-style-type: none"> • Pure Unit 1 - Algebra and functions (part 1) • Pure Unit 2 - Further algebra • Applied Unit 1 - Data presentation and interpretation (part 1) • Applied 2 - Statistical distributions • Applied Unit 7 - Quantities and units in mechanics • Applied Unit 8 - Kinematics 1 (constant acceleration) (8a) | <ul style="list-style-type: none"> • Pure Unit 3 - Differentiation • Pure Unit 4 - Integration • Applied Unit 3 - Probability • Applied Unit 4 - Statistical sampling • Applied Unit 8 - Kinematics 1 (constant acceleration) (8b) • Applied Unit 9 - Forces & Newton's laws (9a) | <ul style="list-style-type: none"> • Pure Unit 5 - Vectors (2D) • Pure Unit 6 - Coordinate geometry in the (x, y) plane • Applied Unit 5 - Statistical hypothesis testing • Applied Unit 9 - Forces & Newton's laws (9b) | <ul style="list-style-type: none"> • Pure Unit 7 - Trigonometry • Applied Unit 6 - Data presentation and interpretation (part 2) | <ul style="list-style-type: none"> • Pure Unit 8 - Algebra and functions (part 2) • Pure Unit 9 - Exponentials and logarithms: Exponential functions and natural logarithms • Applied Unit 10 - Kinematics 2 (variable acceleration) | <ul style="list-style-type: none"> • Y13 Pure Unit 1 - Algebraic and partial fractions • Y13 Pure Unit 2 - Trigonometry (part 1) • Y13 Applied Unit 1 - The Normal distribution (1a) • Y13 Applied Unit 4 - Forces at any angle (part 1): Resolving forces • Y13 Applied Unit 5 - Further kinematics (part1): Constant acceleration (equations of motion in 2D; the i, j system) |

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| | <p>Key knowledge</p> | <p>Algebraic expressions – basic algebraic manipulation, indices and surds</p> <p>Quadratic functions – factorising, solving, graphs and the discriminants</p> <p>Equations – quadratic/linear simultaneous</p> <p>Straight-line graphs, parallel/perpendicular, length and area problems</p> <p>Circles – equation of a circle, geometric problems on a grid</p> <p>Algebraic division, factor theorem and proof</p> <p>The binomial expansion</p> <p>Calculation and interpretation of measures of location and measures of variation; Understand and use coding</p> <p>Use discrete distributions to model real-world situations; Identify the discrete uniform distribution; Calculate probabilities using the binomial distribution (calculator use expected)</p> <p>Introduction to mathematical modelling and standard</p> | <p>Definition, differentiating polynomials, second derivatives</p> <p>Gradients, tangents, normals, maxima and minima</p> <p>Definition as opposite of differentiation, indefinite integrals of x^n</p> <p>Definite integrals and areas under curves</p> <p>Record, describe and analyse the frequency of outcomes of probability experiments using tables and frequency trees</p> <p>Apply ideas of randomness, fairness and equally likely events to calculate expected outcomes of multiple future experiments</p> <p>Relate relative expected frequencies to theoretical probability, using appropriate language and the 0–1 probability scale</p> <p>Apply the property that the probabilities of an exhaustive set of outcomes sum to one; apply the property that the probabilities of an exhaustive set of</p> | <p>Definitions, magnitude/direction, addition and scalar multiplication</p> <p>Position vectors, distance between two points, geometric problems</p> <p>Graphs – cubic, quartic and reciprocal</p> <p>Transformations – transforming graphs – $f(x)$ notation</p> <p>Language of hypothesis testing; Significance levels</p> <p>Carry out hypothesis tests involving the binomial distribution</p> <p>Newton’s first law, force diagrams, equilibrium, introduction to $\underline{i}, \underline{j}$ system</p> <p>Newton’s second law, ‘$F = ma$’, connected particles (no resolving forces or use of $F = \mu R$); Newton’s third law: equilibrium, problems involving smooth pulleys</p> | <p>Trigonometric ratios and graphs</p> <p>Trigonometric identities and equations</p> <p>Interpret diagrams for single-variable data; Interpret scatter diagrams and regression lines; Recognise outliers</p> | <p>Inequalities – linear and quadratic (including graphical solutions)</p> <p>Graphs – cubic, quartic and reciprocal</p> <p>Transformations – transforming graphs – $f(x)$ notation</p> <p>Exponential functions and natural logarithms</p> <p>Variable force; Calculus to determine rates of change for kinematics</p> <p>Use of integration for kinematics problems i.e.</p> $r = \int v dt, v = \int a dt$ | <p>Simplifying algebraic fractions</p> <p>Partial fractions</p> <p>Radians (definition and exact values)</p> <p>Small angles</p> <p>Secant, cosecant and cotangent (definitions, identities and graphs); Inverse trigonometrical functions</p> <p>Compound angle formulae</p> <p>Understand and use the Normal distribution</p> <p>Use the Normal distribution as an approximation to the binomial distribution.</p> <p>Selecting the appropriate distribution.</p> <p>Statistical hypothesis testing for the mean of the Normal distribution</p> <p>Resolving forces</p> <p>Constant acceleration (equations of motion in 2D; the $\underline{i}, \underline{j}$ system)</p> |
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| | | <p>S.I. units of length, time and mass</p> <p>Definitions of force, velocity, speed, acceleration and weight and displacement;</p> <p>Vector and scalar quantities</p> <p>Graphical representation of velocity, acceleration and displacement</p> <p>Motion in a straight line under constant acceleration; <i>suvat</i> formulae for constant acceleration; Vertical motion under</p> | <p>mutually exclusive events sum to one</p> <p>Enumerate sets and combinations of sets systematically, using tables, grids</p> <p>Construct theoretical possibility spaces for single and combined experiments with equally likely outcomes and use these to calculate theoretical probabilities</p> <p>Tree diagrams and Venn diagrams</p> <p>Introduction to sampling terminology; Advantages and disadvantages of sampling</p> <p>Understand and use sampling techniques; Compare sampling techniques in context</p> <p>Graphical representation of velocity, acceleration and displacement</p> <p>Motion in a straight line under constant acceleration; <i>suvat</i> formulae for constant acceleration; Vertical motion under gravity</p> <p>Newton's first law, force diagrams, equilibrium, introduction to \mathbf{i}, \mathbf{j} system</p> <p>Newton's second law, '$F = ma$', connected</p> | | | | |
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| | | | particles (no resolving forces or use of $F = \mu R$); Newton's third law: equilibrium, problems involving smooth pulleys | | | | |
| Vocabulary instruction | Expression, function, constant, variable, term, unknown, coefficient, index, linear, identity, simultaneous, elimination, substitution, factorise, completing the square, intersection, change the subject, cross-multiply, power, exponent, base, rational, irrational, reciprocal, root, standard form, surd, rationalise, exact, manipulate, sketch, plot, quadratic, maximum, minimum, turning point, discriminant, real roots, repeated roots, intercepts. Binomial, coefficient, probability, proof, assumptions, deduction, exhaustion, disproof, counter-example, polynomials, factorisation, quadratic, cubic, quartic, conjecture, prediction, rational number, implies, necessary, | Differentiation, derivative, first principles, rate of change, rational, constant, tangent, normal, increasing, decreasing, stationary point, maximum, minimum, integer, calculus, function, parallel, perpendicular Calculus, differentiate, integrate, reverse, indefinite, definite, constant, evaluate, intersection Sample space, exclusive event, complementary event, discrete random variable, continuous random variable, mathematical modelling, independent, mutually exclusive, Venn diagram, tree diagram Population, census, sample, sampling unit, sampling frame, simple random sampling, stratified, systematic, quota, opportunity (convenience) sampling. | Vector, scalar, magnitude, direction, component, parallel, perpendicular, modulus, dimension, ratio, collinear, scalar product, position vectors reciprocal, root, standard form, surd, rationalise, exact, manipulate, sketch, plot, quadratic, maximum, minimum, turning point, transformation, translation, polynomial, discriminant, real roots, repeated roots, factor theorem, quotient, intercepts, inequality, asymptote Equation, bisect, centre, chord, circle, circumcircle, coefficient, constant, diameter, gradient, hypotenuse, intercept, isosceles, linear, midpoint, parallel, perpendicular, proportion, Pythagoras, radius, | Sine, cosine, tangent, interval, period, amplitude, function, inverse, angle of elevation, angle of depression, bearing, degree, identity, special angles, unit circle, symmetry, hypotenuse, opposite, adjacent, intercept Histogram, box plot, probability density function, cumulative distribution function, continuous random variable, scatter diagram, linear regression, explanatory (independent) variables, response (dependent) variables interpolation, extrapolation, product moment correlation coefficient (PMCC). | Factorise, intersection, root, manipulate, sketch, plot, quadratic, maximum, minimum, turning point, transformation, translation, polynomial, discriminant, real roots, repeated roots, factor theorem, quotient, intercepts, inequality, asymptote. Exponential, exponent, power, logarithm, base, initial, rate of change, compound interest Distance, displacement, velocity, speed, constant acceleration, variable acceleration, retardation, deceleration, gradient, area, differentiate, integrate, rate of change, straight-line motion, with respect to time, constant of integration, initial conditions. | Polynomial, numerator, denominator, factor, difference of two squares, quadratic, power, index, coefficient, degree, squared, coefficients, improper, identity, algebraic fraction, partial fraction, rational. Pythagoras, Pythagorean triple, right-angled triangle, opposite, adjacent, hypotenuse, trigonometry, sine, cosine, tangent, secant, cosecant, cotangent, SOHCAHTOA, exact, symmetry, periodicity, identity, equation, interval, quadrant, degree, radian, circular measure, infinity, asymptote, small angles, approximation, identity. | |

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| | | <p>sufficient, converse, fully factorise, factor, expand, therefore, conclusion</p> <p>Mean, median, mode, variance, standard deviation, range, interquartile range, interpercentile range, outlier, skewness, symmetrical, positive skew, negative skew.</p> <p>Binomial, probability, discrete distribution, discrete random variable, uniform, cumulative probabilities.</p> <p>Modelling, smooth, rough, light, inelastic, inextensible, particle, rigid body, mass, weight, rod, plane, lamina, length, distance (m), displacement (m), velocity ($m s^{-1}$), speed ($m s^{-1}$), acceleration ($m s^{-2}$), force (N), retardation ($m s^{-2}$), newtons (N), scalar, vector, direction, magnitude, (normal) reaction, friction, tension, thrust, compression</p> <p>Distance (m), displacement (m), speed ($m s^{-1}$), velocity ($m s^{-1}$), acceleration ($m s^{-2}$), retardation ($m s^{-2}$), deceleration ($m s^{-2}$), scalar, vector,</p> | <p>Distance (m), displacement (m), speed ($m s^{-1}$), velocity ($m s^{-1}$), acceleration ($m s^{-2}$), retardation ($m s^{-2}$), deceleration ($m s^{-2}$), scalar, vector, 2D, linear, area, trapezium, gradient, equations of motion, gravity, constant, $9.8 m s^{-2}$, vertical.</p> <p>Force, newtons, mass, weight, gravity, tension, thrust, compression, air resistance, reaction, driving force, braking force, resultant, force diagram, equilibrium, inextensible, light, negligible, particle, smooth, uniform, pulley, string, retardation, free particle.</p> | <p>right angle, segment, semicircle, simultaneous, tangent</p> <p>Hypotheses, significance level, one-tailed test, two-tailed test, test statistic, null hypothesis, alternative hypothesis, critical value, critical region, acceptance region, p-value, binomial model, accept, reject, sample, inference.</p> <p>Force, newtons, mass, weight, gravity, tension, thrust, compression, air resistance, reaction, driving force, braking force, resultant, force diagram, equilibrium, inextensible, light, negligible, particle, smooth, uniform, pulley, string, retardation, free particle.</p> | | | <p>Binomial, discrete distribution, discrete random variable, uniform, cumulative probabilities</p> <p>Normal, mean, variance, continuous distribution, histogram, inflection, appropriate probability distribution.</p> <p>Force, weight, tension, thrust, friction, coefficient of friction, μ, limiting, reaction, resultant, magnitude, direction, bearing, force diagram, equilibrium, inextensible, light, negligible, particle, smooth, rough, uniform, perpendicular.</p> <p>Distance, displacement, speed, velocity, constant acceleration, constant force, variable force, variable acceleration, retardation, deceleration, initial ($t = 0$), stationary</p> |
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| | | 2D, linear, area, trapezium, gradient, equations of motion, gravity, constant, 9.8 m s^{-2} , vertical. | | | | | (speed = 0), at rest (speed = 0), instantaneously, differentiate, integrate, turning point. |
| | Subject-specific strand(s) | Algebraic expressions Quadratic functions Equations Straight-line graphs Circles Algebraic division, factor theorem and proof The binomial expansion Variation Coding Discrete Populations Probability Mathematical Modelling Displacement Velocity Acceleration | Differentiation Gradients Integration Understand and use mutually exclusive and independent events when calculating probabilities Link to discrete and continuous distributions Sampling Constant acceleration Vertical motion Newton's Laws | Vectors Graphs Transformations Transforming graphs Language of hypothesis testing; Significance levels Binomial distribution Newton's first law, Newton's second law, Newton's third law: | Trigonometric ratios and graphs Trigonometric identities and equations Single-variable data Scatter diagrams Regression lines | Inequalities Graphs – cubic, quartic and reciprocal Transformations Transforming graphs Exponential functions and natural logarithms Kinematics - Integration | Algebraic fractions Partial fractions Radians Inverse trigonometrical functions Compound angle formulae The Normal distribution Statistical hypothesis testing Resolving forces Constant acceleration |
| Year 13 A Level Maths | Assessment task(s)/title(s) | <ul style="list-style-type: none"> Pure Unit 3 - Differentiation Pure Unit 4 - Integration Applied Unit 1 - The Normal distribution (1b) Applied Unit 6 - Applications of kinematics: Projectiles Applied Unit 7 - Forces at any angle (part 2): | <ul style="list-style-type: none"> Pure Unit 4 - Integration Pure Unit 5 - Proof Pure Unit 6 - Functions and modelling Applied Unit 1 - The Normal distribution (1c) Applied Unit 8 - Applications of forces (part 1) | <ul style="list-style-type: none"> Pure Unit 7 - Series and sequences Pure Unit 8 - The binomial theorem Applied Unit 2 - Probability Applied Unit 9 - Further kinematics (part 2): Variable acceleration | <ul style="list-style-type: none"> Pure Unit 9 - Trigonometry (part 2) Pure Unit 10 - Parametric equations Applied Unit 10 - Moments: Forces' turning effect Applied Unit 3 - Regression | <ul style="list-style-type: none"> Pure Unit 11 - Numerical methods* Pure Unit 12 - Vectors (3D) Applied Unit 11 - Applications of forces (part 2): Equilibrium and statics of a particle (including ladder problems) | |

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| | | Friction forces (including coefficient of friction μ) | | (use of calculus and finding vectors) | and correlation | |
| | Key knowledge | <p>Differentiating $\sin x$ and $\cos x$ from first principles</p> <p>Differentiating exponentials and logarithms</p> <p>Differentiating products, quotients and implicit functions.</p> <p>Second derivatives (rates of change of gradient, inflections)</p> <p>Rates of change problems (including growth and kinematics) - see Integration (part 2) –</p> <p>Differential equations</p> <p>Integrating x^n (incl. when $n = -1$), exponentials, trigonometric functions.</p> <p>Using the reverse of differentiation, and using trigonometric identities to manipulate integrals</p> <p>Integration by substitution</p> | <p>Integrating x^n (incl. when $n = -1$), exponentials, trigonometric functions.</p> <p>Using the reverse of differentiation, and using trigonometric identities to manipulate integrals</p> <p>Integration by substitution</p> <p>Integration by parts</p> <p>Use of partial fractions</p> <p>Areas under graphs or between 2 curves, incl. understanding area as limit of a sum (using sigma notation).</p> <p>The trapezium rule</p> <p>Proof - Examples including proof by deduction, proof by exhaustion and disproof by counter example</p> <p>Modulus function</p> <p>Composite and inverse functions</p> <p>Transformations</p> | <p>Arithmetic and geometric progressions (proofs of 'sum formulae')</p> <p>Sigma notation</p> <p>Recurrence and iterations</p> <p>Expanding $(a + bx)^n$ for rational n</p> <p>knowledge of range of validity</p> <p>Expansion of functions by first using partial fractions</p> <p>Using set notation for probability.</p> <p>Conditional probability</p> <p>Questioning assumptions in probability</p> <p>Variable acceleration (use of calculus and finding vectors \dot{r} and \ddot{r} at a given time)</p> | <p>Arcs and sectors</p> <p>Compound and double (and half) angle formulae; geometric proof of compound angle formula</p> <p>$R \cos(x \pm \alpha)$ or $R \sin(x \pm \alpha)$</p> <p>Proving trigonometric identities</p> <p>Solving problems in context (e.g. mechanics)</p> <p>Definition and converting between parametric and Cartesian forms</p> <p>Curve sketching and modelling</p> <p>Differentiating parametric functions.</p> <p>Integrating functions defined parametrically.</p> <p>Areas under curves expressed parametrically</p> <p>Forces' turning effect</p> <p>Change of variable</p> <p>Correlation coefficients.</p> <p>Statistical</p> | <p>Location of roots</p> <p>Solving by iterative methods (knowledge of 'staircase and cobweb' diagrams)</p> <p>Newton-Raphson method</p> <p>Problem solving</p> <p>Use of vectors in three dimensions; knowledge of column vectors and i, j and k unit vectors</p> <p>Equilibrium and statics of a particle (including ladder problems)</p> |

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| | | <p>Integration by parts Use of partial fractions Areas under graphs or between 2 curves, incl. understanding area as limit of a sum (using sigma notation). The trapezium rule Understand and use the Normal distribution Use the Normal distribution as an approximation to the binomial distribution. Selecting the appropriate distribution. Statistical hypothesis testing for the mean of the Normal distribution Projectiles Friction forces (including coefficient of friction μ)</p> | <p>Modelling with functions (trigonometric, exponential, reciprocal etc.) Understand and use the Normal distribution Use the Normal distribution as an approximation to the binomial distribution. Selecting the appropriate distribution. Statistical hypothesis testing for the mean of the Normal distribution Equilibrium and statics Dynamics of a particle</p> | | <p>hypothesis testing for zero correlation</p> | |
| | Vocabulary instruction | <p>Derivative, tangent, normal, turning point, stationary point, maximum, minimum, inflexion, implicit, differential equation, rate of change, product, quotient, first derivative, second derivative, increasing function, decreasing</p> | <p>Integral, inverse, differential, coefficient, index, power, negative, reciprocal, natural logarithm, $\ln x$, coefficient, exponential, identity, sin, cos, tan, sec, cosec, cot, ex, parametric, definite integral, integrand,</p> | <p>Sequence, series, finite, infinite, summation notation, Σ(sigma), periodicity, convergent, divergent, natural numbers, arithmetic series, arithmetic progression (AP), common</p> | <p>Pythagoras, Pythagorean triple, right-angled triangle, opposite, adjacent, hypotenuse, trigonometry, sine, cosine, tangent, secant, cosecant, cotangent,</p> | <p>Roots, continuous, function, positive, negative, converge, diverge, interval, derivative, tangent, chord, iteration, Newton-Raphson, staircase, cobweb, trapezium rule. Vector, scalar, column, 3D coordinates, vertices, Cartesian, i, j, k,</p> |

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| | | <p>function. Integral, inverse, differential, coefficient, index, power, negative, reciprocal, natural logarithm, $\ln x$, coefficient, exponential, identity, sin, cos, tan, sec, cosec, cot, ex, parametric, definite integral, integrand, limit, indefinite integral, constant of integration, trapezium, substitution, by parts, area, differential equation, first order, separating variables, initial conditions, general solution. Proof, verify, deduction, contradict, rational, irrational, square, root, prime, infinity, square number, quadratic, expansion, trigonometry, Pythagoras. Function, mapping, domain, range, modulus, transformation, composite, inverse, one to one, many to one, mappings, $f(x)$, $fg(x)$ and $f^{-1}(x)$, reflect, translate, stretch. Binomial, discrete distribution, discrete random variable, uniform, cumulative probabilities Normal, mean, variance, continuous distribution, histogram, inflection, appropriate probability distribution. Projectile, range, vertical, horizontal, component, acceleration, gravity,</p> | <p>limit, indefinite integral, constant of integration, trapezium, substitution, by parts, area, differential equation, first order, separating variables, initial conditions, general solution. Proof, verify, deduction, contradict, rational, irrational, square, root, prime, infinity, square number, quadratic, expansion, trigonometry, Pythagoras. Function, mapping, domain, range, modulus, transformation, composite, inverse, one to one, many to one, mappings, $f(x)$, $fg(x)$ and $f^{-1}(x)$, reflect, translate, stretch. Binomial, discrete distribution, discrete random variable, uniform, cumulative probabilities Normal, mean, variance, continuous distribution,</p> | <p>difference, geometric series, geometric progression (GP), common ratio, nth term, sum to n terms, sum to infinity (S_{∞}), limit. Binomial, expansion, theorem, integer, rational, power, index, coefficient, validity, modulus, factorial, nCr, combinations, Pascal's triangle, partial fractions, approximation, converges, diverges, root. Sample space, exclusive event, complementary event, discrete random variable, continuous random variable, mathematical modelling, independent, mutually exclusive, Venn diagram, tree diagram, set notation, conditional probability, two-way tables,</p> | <p>SOHCAHTOA, exact, symmetry, periodicity, identity, equation, interval, quadrant, degree, radian, circular measure, infinity, asymptote, small angles, approximation, identity, proof. Parametric, Cartesian, convert, parameter t, identity, eliminate, substitute, circle, hyperbola, parabola, ellipse, domain, modelling, differential, integral, area. Moment, turning effect, sense, newton metre (Nm), equilibrium, reaction, tension, rod, uniform, non-uniform, centre of mass, resolve, tilting, 'on the point', concurrent. Hypotheses, significance level,</p> | <p>magnitude, origin, distance, direction, angle, position vector, unit vector, vector addition/subtraction. Force, resultant, component, resolving, plane, parallel, perpendicular, weight, tension, thrust, friction, air resistance, reaction, driving force, braking force, force diagram, equilibrium, inextensible, light, negligible, particle, rough, smooth, incline, uniform, friction, coefficient of friction, concurrent, coplanar.</p> |
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| | | <p>initial velocity, vector, angle of projection, position, trajectory, parabola.</p> <p>Friction, coefficient of friction, μ, limiting, reaction, resultant, magnitude, direction, force diagram, equilibrium, smooth, rough</p> | <p>histogram, inflection, appropriate probability distribution.</p> <p>Force, resultant, component, resolving, plane, parallel, perpendicular, weight, tension, thrust, friction, air resistance, reaction, driving force, braking force, force diagram, equilibrium, inextensible, light, negligible, particle, rough, smooth, incline, uniform, friction, coefficient of friction, concurrent, coplanar.</p> | <p>critiquing assumptions.</p> <p>Distance, displacement, speed, velocity, constant acceleration, constant force, variable force, variable acceleration, retardation, deceleration, initial ($t = 0$), stationary (speed = 0), at rest (speed = 0), instantaneously, differentiate, integrate, turning point.</p> | <p>one-tailed test, two-tailed test, test statistic, null hypothesis, alternative hypothesis, critical value, critical region, acceptance region, p-value, binomial model, correlation coefficients, product moment correlation coefficient, population coefficient, sample, inference, mean, normal distribution, variance, assumed variance, linear regression, interpolation, extrapolation, coded data</p> | |
| | Subject-specific strand(s) | <p>Differentiating $\sin x$ and $\cos x$</p> <p>Differentiating exponentials and logarithms</p> <p>Second derivatives</p> <p>Rates of change</p> <p>Integration by substitution</p> | <p>Integrating x^n</p> <p>Integration by substitution</p> <p>Integration by parts</p> <p>Use of partial fractions</p> <p>Areas under graphs</p> <p>The trapezium rule</p> <p>Proof</p> | <p>Arithmetic and geometric progressions</p> <p>Sigma notation</p> <p>Recurrence and iterations</p> <p>Partial Fractions</p> | <p>Arcs and sectors</p> <p>Angle formulae</p> <p>Proving trigonometric identities</p> <p>Solving problems in context (e.g. mechanics)</p> | <p>Location of roots</p> <p>Iterative methods</p> <p>Newton-Raphson method</p> <p>Problem solving</p> <p>Use of vectors in three dimensions;</p> <p>Equilibrium and statics of a particle</p> |

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| | | <p>Integration by parts Use of partial fractions Areas under graphs The trapezium rule Normal distribution Statistical hypothesis testing Projectiles Friction forces</p> | <p>Modulus function Composite and inverse functions Transformations Modelling with functions (trigonometric, exponential, reciprocal etc.) Normal distribution Statistical hypothesis testing Equilibrium and statics Dynamics of a particle</p> | <p>Set notation. Conditional probability Variable acceleration</p> | <p>Definition and converting between parametric and Cartesian forms Curve sketching Differentiating and Integrating functions defined parametrically. Areas under curves Forces' turning effect Change of variable Correlation coefficients. Statistical hypothesis testing for zero correlation</p> | | |
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