The property and an implication control of the property of the	including use of the product rule for counting (i.e., if there are my vary of doing one task and for each of total number, factors or mutiples, and the unique  including use of the product rule for counting (i.e., if there are my vary of doing one task and for each of total number, factors or mutiples, and the unique  including use of the product rule for counting (i.e., if there are my vary of doing one task and for each of total number, factors or mutiples, and the unique  including use of the product rule for counting (i.e., if there are my vary of doing one task and for each of total number are my vary of doing one task and for each of total number are my vary of doing one task and for each of total number are my vary of doing one task and for each of total number are my vary of doing one task and for each of total number are my vary of doing one task and for each of total number are my vary of doing one task and for each of total number are my vary of doing one task and for each of total number are my vary of doing one task and for each of total number are my vary of doing one task and for each of total number are my vary of doing one task and for each of total number are my vary of doing one task and for each of total number are my vary of doing one task and for each of the number are my vary of doing one task and for each of the number are my vary of doing one task and for each of the number are my vary of the number				Foundation	Both	Higher
The control of the co	internethods, oper and control of the product rule for counting (u.e. of the rule of the product rule for counting (u.e. of the rule of the product rule for counting (u.e. of the rule of the product rule for counting (u.e. of the rule of the product rule for counting (u.e. of the rule of the r					DULII	Higher
The part of the product is including use of the product role for agrating updated and up place with part of agrating updated and up place with part of agrating updated and up	reations, including by when working exceedables by an exceedable of prototy of and reciprocals including the calculations or princity of and reciprocals including use of the product rule for counting (i.e. if there are in ways) of doing one task and for each of task in immediate the unique including use of the product rule for counting (i.e. if there are in ways) of doing one task and for each of task in immediate of ways the two tasks can be done in in a vary).  and roots (square, including the product rule for counting (i.e. if there are in ways) of doing one task and for each of task in immediate powers and roots of any given positive number and the unique in the product rule for counting (i.e. if there are in ways) of doing one task and for each of task in immediate powers and roots of any given positive number and roots (square, in ways) of doing one task and for each of task in immediate powers and roots of any given positive number and roots (in a ways) of doing one task and for each of task in immediate powers and roots of any given positive number and roots (in a ways) of doing one task and for each of task in immediate powers and roots of any given positive number and roots (in a ways) of doing one task and for each of task in immediate powers and roots of any given positive number and roots (in a ways) of doing one task and for each of task in immediate powers and roots of any given positive number and roots (in a ways) of doing one task and for each of task in immediate powers and roots (in a ways) of doing one task and for each of task intended to a way and roots (in a ways) of doing one task and for each of task intended task in a way of doing one task and for each of task intended task in a way of doing one task and for each of task intended task in a way of doing one task and for each of task intended task in a way of doing one task in a for each of task intended task in a way of doing one task in a for each of task intended task in a way of doing one task in a for each of task intended task in			N1			
The property of the product of the p	since and many control of the calculations for priority of and reciprocals mobers, factors and the unique and reciprocals mobers, factors and the unique and reciprocals and the unique and reciprocals and the unique and reciprocals and the unique and reciprocal and reciprocal and reciprocal and and unique and reciprocal and re				apply the four operations, including formal written methods,		
The state of the control of the cont	g, when working her activating fly activations of property of any property of the product rule for counting (a. if there are m ways of doing note task and for each of these, there are m ways of doing note task and for each of these, there are m ways of doing note task and for each of these, there are m ways of doing note task and for each of these, there are m ways of doing note task and for each of these, there are m ways of doing note task and for each of these, there are m ways of doing note task and for each of these, there are m ways of doing note task and for each of these, there are m ways of doing note task and for each of these, there are m ways of doing note task and for each of these are m ways of doing note task and for each of these are m ways of doing note task and for each of these are m ways of doing note task and for each of these are m ways of doing note task and for each of these are m ways of doing note task and for each of these are m ways of doing note task and for each of the form ask and for each of the task and for each of the form ask and for each of the task and for each of the form ask and for each of the form ask and for each of the form and task and for each of the form ask an						
the body large or very mail in makes, and when calculating with decimal.  If the decimal is the decimal is with decimal in the decimal is with decimal in the decimal is with decimal in the decimal in the decimal is with decimal in the decimal in the decimal in the decimal is with decimal in the decimal in	rations, including in calculations and reciprocals misers, factors on multiples, tipice, prime and the unique in control (square, process) and reciprocals misers, factors on multiples, tipice, prime and the unique in control (square, process) and the unique in control (square, process) and process and multiples of rg and rg	mber					
The properties of the production of the service of the product of the production of the service of the servi	restrons, including the product allows the product to the format property of allows the product to the format						
The properties of a consciolation to simplify circle-latency in the properties of the conscious and	including use of the product rule for counting (i.e., if there are in ways) of doing one task and for each of these, there are in ways of doing one task and for each of these, there are in ways of doing one task and for each of these, there are in ways of doing one task and for each of these, there are in ways of doing one task and for each of these, there are in ways of doing one task and for each of these, there are in ways of doing one task and for each of these, there are in ways of doing one task and for each of these, there are in ways of doing one task and for each of these, there are in ways of doing one task and for each of these, there are in ways of doing one task and for each of these, there are in ways of doing one task and for each of the total number of ways the two tasks can be done is in ways).  and multiples of it is an arrive to the total number of ways the two tasks can be done is in ways.  and multiples of it is an arrive tasks and their or and multiples of it is an arrive expressions involving squares (e.g., VI.) and multiples of it is an arrive expression involving squares (e.g., VI.) and multiples of it is an arrive expression involving squares (e.g., VI.) and multiples of it is an arrive expression involving squares (e.g., VI.) and multiples of it is an arrive expression involving squares (e.g., VI.) and multiples of it is an arrive expression involving squares (e.g., VI.) and multiples of it is an arrive expression involving squares (e.g., VI.) and multiples of it is an arrive expression involving squares (e.g., VI.) and multiples of it is an arrive expression involving squares (e.g., VI.) and multiples of its involving squares (e.g., VI.) and its i			N2			
The properties of the processor and concentration attention to simplify includations of the processor and operations, including and appreciation, income comment including the processor and operations and the processor and operations are supported to the processor and	including use of the product rule for counting (i.e. if there are in ways of doing one task and for each of these, there are in ways of doing one task and for each of these, there are in ways of doing one task and for each of these, there are in ways of doing one task and for each of these, there are in ways of doing one task and for each of these, there are in ways of doing one task and for each of these, there are in ways of doing one task and for each of these, there are in ways of doing one task and for each of these, there are in ways of doing one task and for each of these, there are in ways of doing one task and for each of these, there are in ways of doing one task and for each of these, there are in ways of doing one task and for each of these, there are in ways of doing one task and for each of these, there are in ways of doing one task and for each of the total number of ways the two tasks can be done is an away.  In the control of the each				recognise and use relationships between operations, including		
The properties including statester, power, notest and registery common statics, increase members, lacknown in the form of the product railer or the common statics, fower common mittigle, primer factorisation, including using product notation and the unique factorisation includes using product notation and the unique factorisation including user of the product railer or the common statics, fower common mittigle, primer factorisation includes using product notation and the unique factorisation includes using product notation and the unique factorisation including user of the product railer or the common statics, fower area ways of doing and the thirty, there are no ways of doing and the thirty, there are no ways of doing and the thirty, there are no ways of doing and the thirty, there are no ways of doing and the thirty, there are no ways of doing and the thirty, there are no ways of doing and the thirty, there are no ways of doing and the thirty, there are no ways of doing and the thirty of the rail of the product railer or the thirty of the rail of the product railer or the thirty of the rail of the product railer or the transfer of the rail of the product railer or the rai	and reciprocals mere, sectors on multiples, typing, prime and the unique where sectors of the product rule for counting (i.e. if there are m ways of doing none task and for each of these, there are m ways of doing none task and for each of these, there are m ways of doing none task and for each of these, there are m ways of doing none task and for each of the total number of ways the two tasks can be done is a nawys) and construct task, then total number of ways the two tasks can be done is a nawys) and restrictional sumber of ways the two tasks can be done is a nawys) and multiples of m ways of coing none track, and with integer indices and multiples of m ways of coing none track, and with integer indices and multiples of m ways of coing none track, and with integer indices and multiples of m ways of coing none track, and integer indices and multiples of m ways of coing none track, and integer indices and multiples of m ways of coing none track, and integer indices and multiples of m ways of coing none track, and ways of coing none track, and integer indices and multiples of m ways of coing none track, and proofs interpret the reverse process as the "inverse function ways of coing none track, and proofs interpret the reverse process as the "inverse function ways of the form and proofs of the form of the use of formal function notation is expected.  In a decimals  In a						
The part of the product of the product rule for re- part of the product rule for re- part of the part of the product rule for re- part of the part of	moters, factors on multiples, giple, prime and the unique  motading use of the product rule for counting (a. b., interest in multiples, giple, prime and the unique  motading use of the product rule for counting (a. b., interest in multiples of π such of the sea, the many of doing one task and for each of these than the product rule for counting (a. b., interest in multiples of π such as and fact and the result in the sea, the sea of the sea of the sea, the sea of th						
Page	on multiples, prime in and the unique including use of the product rule for counting (i.e. including use of the product rule for counting (i.e. including use of the product rule for counting (i.e. including use of the product rule for counting (i.e. including use of the product rule for counting (i.e. including use of the product rule for counting (i.e. including use of the product rule for counting (i.e. including use of the product rule for counting (i.e. including use of the product rule for counting (i.e. including use of the product rule for counting (i.e. including use of the product rule for counting (i.e. including use of the product rule for counting (i.e. including use of the product rule for counting (i.e. including use of the product rule for counting (i.e. including use of use inequality notation to specify simple error intervals due to truncation or rounting (i.e. including use of use inequality notation to specify simple error intervals due to truncation or rounting (i.e. including use of use inequality notation to specify simple error intervals due to truncation or rounting (i.e. including use of use inequality notation to specify simple error intervals due to truncation or rounting (i.e. including use of use inequality notation to specify simple error intervals due to truncation or rounting (i.e. including use of use inequality notation to specify simple error intervals due to truncation or rounting (i.e. including use of use inequality notation to specify simple error intervals due to truncation or rounting (i.e. including use of use inequality notation to specify simple error intervals due to truncation in specify and interpret hints of security use of use inequality notation to specify and interpret which is specify and interpret which is specify and interpret including the security of use including use and including use of use including use of use of use of use of the form as 2 + companies of use of u		_	N3			
Description of the product role for the control of these serves with these, there are in ways of doing one task at these, there are in ways of doing one task at these, there are in ways of doing one task at these, there are in ways of doing one task at the control of the cont	in and the unique  Including use of the product rule for counting (i.e., interest are m ways of doing another task, there to take another task, there are m ways of doing another task, there to take another task, there are m ways of doing another task, there to take another task, there are m ways of doing another task, there to take another task, there are m ways of doing another task, there is no and in task, and the task and there is a may of the task and the task and there are m ways of doing another task, there are m ways of doing another task, there is an another task, there is a may and there is a may and there are m ways of doing another task, there is a may and there are m ways of doing another task, there is an another task, and there is a may and there are m ways of doing another task, there are may and there is an another task, and in a way and there are m ways of doing another task, there are m ways of doing another task, there are may and there are m ways of doing another task, there are may and there are may and the task and there are may and task and there are m ways of doing and task and there are m ways of doing and task and there are m ways of doing and task and there are another and the task and the another and the task and there are another anoth		렱				
Deputy contenues intering strategies  No. apply contenues intering strategies and strategies of	including use of the product rule for counting (i.e. if there are m ways of doing one task and for each of these, there are m ways of doing one task and for each of these, there are m ways of doing one task and for each of these, there are m ways of doing one task and for each of the total number of ways the two tasks can be done is now any;  and routine of ways the two tasks can be done is now any;  calculate with roots, and with integer indices  and multiples of n		를				
Description of the product role for the control of these serves with these, there are in ways of doing one task at these, there are in ways of doing one task at these, there are in ways of doing one task at these, there are in ways of doing one task at the control of the cont	there are m ways of doing one task and for each of these, there are n ways of doing one task and for each of a reasy, 1, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 3, 2, 2, 2, 2, 2, 2, 3, 2, 2, 2, 2, 2, 3, 2, 2, 2, 2, 2, 3, 3, 3, 3, 3, 3, 3, 3, 3, 3, 3, 3, 3,		8	NI A			
these, there are no way of oling and to tool manhower of ways the two tables.  It is appropriate integer powers and associated real roots (equace, cance and higher), recogning powers of 2, 5, 5.  It is also an exactly with first tions.  It is calculate with roots, and with integer notice.  It is calculate on exactly with first tions.  It is calculated on an integer of the calculated on the care of the calculated on the calcu	these, there are <i>n</i> ways of doing another task, there total number of ways the two tasks can be done is a ways) sal roots (square, 5.5 estimate powers and roots of any given positive number and fractional simplify surd expressions involving squares (e.g. v1.7 y(4 × 3) = v4 × v3 = 2v3) and rationalise denominate or 0.375 or and simplify surd expressions involving squares (e.g. v1.7 y(4 × 3) = v4 × v3 = 2v3) and rationalise denominate or 0.375 or and some survey of the same survey of		•	144	lactorisation theorem		including use of the product rule for counting (i.e. if
Supply systematic inting strategies with control of any piece of a color and spiece region power and as discontent real roots (square, less and spiece) with regions power of \$2, 1, 4, 5 and 1	total number of ways the two tasks can be done is . n ways). s calculate with roots, and with integer indices and fractional simplify surd expressions involving squares (e.g., v1. v10°, where 1 ≤ and multiples of π						
colliciate worth with fractions  and multiples of n  consistent event with fractions and interpret standard form A + 10", where 1 c  A + 10 and n is a limitage.  The proof of	all roots (square, 5.5 estimate powers and roots of any given positive number and ractional simplify surd expressions involving squares (e.g., VI. γ(4 × 3) = v4 × v3 = 2v3) and rationalise denominate and their or 0.375 or and change recurring decimals into their corresponding fractions and vice versa and roots of their corresponding fractions and vice versa change of the survey of the sur						
colliciate worth with fractions  and multiples of n  consistent event with fractions and interpret standard form A + 10", where 1 c  A + 10 and n is a limitage.  The proof of	sal roots (square, 5.  calculate with roots, and with integer indices and fractional simplify surd expressions involving squares (e.g., VI γ(4 × 3) = V4 × V3 = 2V3) and rationalise denominate (a.g., VI γ(4 × 3) = V4 × V3 = 2V3) and rationalise denominate (base on 3.75 or and con 3.75			N5	apply systematic listing strategies		I
calculate exist, with fractions carregulated particulate particulated and calculate corregulated particulates and controlled and calculate corregulated particulates and calculate corregulates and controlled particulates corregulated particulates corregulates corregula	calculate with roots, and with integer indices  and multiples of $\pi$ **10", where 1 \( \)  **10" and multiples of $\pi$ **10", where 1 \( \)  **10" and multiples of $\pi$ **10" and and their or 0.375 or and change recurring decimals into their corresponding fractions and vice versa  **10" and of their survey using corresponding fractions and vice versa  **10" and their or 0.375 or and change recurring decimals into their corresponding fractions and vice versa  **10" and their or				use positive integer powers and associated real roots (square,		estimate powers and roots of any given positive
calculate exist, with fractions carregulated particulate particulated and calculate corregulated particulates and controlled and calculate corregulated particulates and calculate corregulates and controlled particulates corregulated particulates corregulates corregula	simplify surd expressions involving squares (e.g., V1 (/d × 3) = V4 × V3 = 2/3) and rationalise denominate v1 (/d × 3) = V4 × V3 = 2/3) and rationalise into their corresponding fractions and vice versa v1 (/d × 3) = V4 × V3 = 2/3) and rationalise denominate v1 (/d × 3) = V4 × V3 = 2/3) and rationalise into their corresponding fractions and vice versa v1 (/d × 3) = V4 × V3 = 2/3) and rationalise into their corresponding fractions v1 (/d × 4) = V4 × V4 = 2/3) and rationalise denominate v1 (/d × 4) = V4 × V4 = 2/3) and rationalise denominate v1 (/d × 4) = V4 × V4 = 2/3) and rationalise denominate v1 (/d × 4) = V4 × V4 = 2/3) and rationalise	키			cube and higher), recognise powers of 2, 3, 4, 5	calculate with roots, and with integer indices	
conclusion with recommendate form x 10°, where 1 is 4 in a conclusion with miserprest standard form x 10°, where 1 is 4 in a property of the conception of t	and multiples of rx  \( \( \frac{\pmathcal{3}}{\pmathcal{4}} \times \frac{\pmathcal{4}{\pmathcal{4}} \times \frac{\pmathcal{4}	_		IN /		Calculate with roots, and with integer indices	and fractional
coloulate with and interpret standard rorm A + 107, where 1 s  A + 10 and n is nimeger  work interchangeably with treminating decimals and their corresponding factories (such as 3 s and 7/2 or 0.375 or and  change recurring decimals into their or fractions and vice verta  change recurring decimals into their or fractions and vice verta  change recurring decimals into their or fractions and vice verta  change recurring decimals into their or fractions and vice verta  change recurring decimals into their or fractions and vice verta  change recurring decimals into their or fractions and vice verta  change recurring decimals into their or fractions and vice verta  change recurring decimals into their or fractions and vice verta  change recurring decimals into their or fractions and vice verta  change recurring decimals into their or fractions and vice verta  change recurring decimals into their or fractions and vice verta  change recurring decimals into their or fractions and vice verta  change recurring decimals into their or fractions and vice verta  change recurring decimals into their or fractions and vice verta  change recurring decimals into their or fractions and vice verta  change recurring decimals into their or fractions and vice verta  change recurring decimals into their or fractions and vice verta  change recurring decimals into their or fractions and vice verta  change recurring decimals into their or fractions and vice verta  change recurring decimals into their or fractions and vice verta  change recurring decimals into their or fractions and vice verta  change recurring decimals into their or fractions and vice verta  change recurring decimals into their or fractions and vice verta  change recurring decimals into their or fractions and vice verta  change recurring decimals into their or fractions and vice verta  change recurring decimals into their or fractions and vice verta  change recurring decimals into their or fractions and vice verta  change recurring decimals into their or fractions and vic	and and their or 0.375 or and constraints and their or 0.375 or and constraints and their or 0.375 or and constraints and their corresponding fractions and vice versa constraints and technology and other assures) using constraints are degree of use inequality notation to specify simple error intervals due to translation and technology and interpret limits of accuracy including upper and lower bounds.    Soft   S						1 . ,
A 1 10 and in its in integer  work interchapsile yet the reministing decimals and their corresponding fractions (such as 3.5 and 7/2 or 0.37 or and corresponding fractions (such as 3.5 and 7/2 or 0.37 or and corresponding fractions (such as 3.5 and 7/2 or 0.37 or and corresponding fractions (such as 3.5 and 7/2 or 0.37 or and corrections and vice werea    10	consideration and their corresponding fractions and vice versa fraction	J		N8		and multiples of π	$\sqrt{(4 \times 3)} = \sqrt{4 \times \sqrt{3}} = 2\sqrt{3}$ ) and rationalise denominate
over interchangeably with terminating octimals and their corresponding fractions (such as 3 and 72 or 0.35 or and 3.76 or 3.95 or 3.95 or 3.95 or and 3.76 or 3.95	coro. 375 or and change recurring decimals into their corresponding fractions and vice versa lens tors help and other source) using suproximation and teethnology at decimal places or use inequality notation to specify simple error intervals due to truncation or rounding apply and interpret limits of accuracy limits and including upper and lower bounds. Higher limits of accuracy limits and including upper and lower bounds. Higher limits of accuracy limits and including upper and lower bounds. Higher limits of accuracy limits and including upper and lower bounds. Higher limits of accuracy limits and including upper and lower bounds. Higher limits of accuracy limits and including upper and lower bounds. Higher limits of accuracy limits and including upper and lower bounds. Higher limits of accuracy limits and lower limits and lowe			N9			
No.   Part   Common and present age as operations and other	lems  lors	ŀ	, x	1	work interchangeably with terminating decimals and their		
No.   Processing the fractions also price in actions and price in actions and price in actions also price in actions and price in actions and price in actions and price in actions and actination, including standard compound measures (not an appropriate degree of actions (i.e., to a specified number of decimal places or intervals due to interpret and activation in a settlement or including activates of decimal places or intervals due to interpret and activate or intervals due to interpret and activate or intervals due to interpret and the interpret and the process of activate (i.e., to a specified number of decimal places or intervals due to interpret and the process of activate (i.e., to a specified number of decimal places or intervals due to interpret and the process of activate (i.e., and the process of activate or intervals due to interpret and the process of activate (i.e., and process of activate (i.e., and process of interpret intervals due to interpret and the process of interpret intervals due to interpret and the process of activate (i.e., and process of activate (i.e., and process of interpret in	lems tors hey and other sures) using  poproximation and technology at degree of al places or all places or all places or buncation or rounding apply and interpret limits of accuracy Both Higher  lidding: a2b in place of a a as decimals  de expressions, alary of s., terms and becomes  identities  (including those involving surds - examaling products of two binomials - factorising quadratic expressions of the form x2 + bx + c, including the difference between an equation and an identity: argue matthematically to show algebraic expressions are equivalent, and use algebra to support and construct arguments.  Interpret the reverse process as the 'inverse function interpret the succession of two furnations as a composite function (interpret either reverse process as the 'inverse function interpret the succession of two furnations as a composite function (interpret the succession of two furnations as a composite function (the use of formal function notation is expected)  use the form y = mx + c to identify parallel lines, find the equation of the line through two given points or through one point with a. given gradient  identify and interpret roots, intercepts, turning points of quadratic functions graphically, deduce roots algebraically  ear functions, y = ks for positive values of k, and the trigonometric functions (with arguments in degrees) = sin x, y = cos y = tan x for angles of any size y = tan x for angles of any size y = tan x for angles of any size y = tan x for angles of any size y = tan x for angles of any size y = tan x for angles of any size y = tan x for angles of any size y = tan x for angles of any size	J	ions nals, tage	NI4 O			
No.   Processing the fractions also price in actions and price in actions and price in actions also price in actions and price in actions and price in actions and price in actions and actination, including standard compound measures (not an appropriate degree of actions (i.e., to a specified number of decimal places or intervals due to interpret and activation in a settlement or including activates of decimal places or intervals due to interpret and activate or intervals due to interpret and activate or intervals due to interpret and the interpret and the process of activate (i.e., to a specified number of decimal places or intervals due to interpret and the process of activate (i.e., to a specified number of decimal places or intervals due to interpret and the process of activate (i.e., and the process of activate or intervals due to interpret and the process of activate (i.e., and process of activate (i.e., and process of interpret intervals due to interpret and the process of interpret intervals due to interpret and the process of activate (i.e., and process of activate (i.e., and process of interpret in	tors beyond other asures) using  poproximation and technology are degree of all places or apply and interpret limits of accuracy  Both  Both  Higher  Including upper and lower bounds  Higher  Including upper and lower bounds  Higher  Including:  a2b in place of a  a has decimals  dexpressions,  liary of s.  s. terms and is a decimals  - tectorising quadratic expressions of the form x2 + bx + c, including the difference of two squares  - the difference of two squares  Including those involving surds  - tectorising quadratic expressions of the form x2 + bx + c, including the difference of two squares  - the difference of two squares  Including those involving surds  - tectorising quadratic expressions of the form x2 + bx + c, including the difference of two squares  - the difference	J	ract lecin rcen				Tractions and vice versa
No.   Page   P	pproximation and technology ate degree of all places or suse inequality notation to specify simple error intervals due to truncation or rounding apply and interpret limits of accuracy including upper and lower bounds.  Both Higher    Including upper and lower bounds   Higher	L	7 p g		interpret fractions and percentages as operators		
The state of the s	poproximation and technology at de degree of al places or al place of al place	ſ	خ	]			
The standard and use standard manipulate algebraic expressions by:    Control of the standard and use standard manipulate algebraic expressions involving sums, products and powers, including the laws of indices    Additionard   Additionard	technology at degree of all places or trounding apply and interpret limits of accuracy apply and interpret and lower bounds apply and interpret limits of accuracy apply and interpret and lower bounds apply and interpret limits of accuracy apply apply and including upper and lower bounds apply		ï	N13			
The properties of the second o	technology at degree of all places or trounding apply and interpret limits of accuracy apply and interpret limits of accuracy including upper and lower bounds apply and interpret limits of accuracy including upper and lower bounds apply and interpret limits of accuracy including upper and lower bounds apply and interpret limits of accuracy including upper and lower bounds apply and interpret limits of accuracy including upper and lower bounds apply and interpret limits of accuracy including upper and lower bounds apply and including upper and lower bounds apply and including upper and lower bounds apply		acc				
The properties of the second o	use inequality notation to specify simple error intervals due to truncation or rounding  apply and interpret limits of accuracy  Both  luding:  a2b in place of a  a2b in place of a  a3c secretarials  despressions,  including those involving surds  - expanding products of two binomials - factorising quadratic expressions of the form x2 + bx + c, including the difference of two squares  commulae;  commulae;  know the difference between an equation and an identity; argue mathematically to show algebraic expressions are equivalent, and use algebra to support and construct arguments.  know the difference between an equation and an identity; argue mathematically to show algebraic expressions are equivalent, and use algebra to support and construct arguments.  interpret the reverse process as the "inverse function interpret the succession of two formal function notation is expected)  use the form y = mx + c to identify parallel lines; find the equation of the line through two given points or through one point with a given gradient  identify and interpret roots, intercepts, turning points of quadratic. functions graphically, deduce roots algebraically  and turning points by completing the square exponential functions (with arguments in degrees) y = sin x, y = cos y = tan x for angles of any size  y = tan x for angles of any size  y = tan x for angles of any size		and				
Foundation	use inequality notation to specify simple error intervals due to truncation or rounding apply and interpret limits of accuracy including upper and lower bounds.  Both Higher  a2b in place of a a decimals adecimals identities  a2b in place of a a decimals identities  including those involving surds    • expanding products of two binomials   • factorising quadratic expressions of two binomials   • according products of two binomials   • according guadratic expressions of the form x2 + bx + c, including the difference of two squares    commulae;   know the difference between an equation and an identity: argue mathematically to show algebraic expressions are equivalent, and use allebra to support and construct arguments.   know the difference between an equation and an identity: argue mathematically to show algebraic expressions are equivalent, and use allebra to support and construct arguments.   interpret the reverse process as the "inverse function interpret the succession of two functions as a "composite function" (the use of formal function notation is expected)  ght-line graphs in of the line through two given points or through one point with a given gradient  identify and interpret roots, intercepts, turning points of quadratic functions (with arguments in degrees) y = sin x, y = cos y = tax for positive values of k, and the trigonometric functions (with arguments in degrees) y = sin x, y = cos y = tax for positive values of k, and the trigonometric functions (with arguments in degrees) y = sin x, y = cos y = tax for positive values of k, and the trigonometric functions (with arguments in degrees) y = sin x, y = cos y = tax for positive values of k, and the trigonometric functions (with arguments in degrees) y = sin x, y = cos y = tax for positive values of k, and the trigonometric functions (with arguments in degrees) y = sin x, y = cos y = tax for positive values of k, and the trigonometric functions (with arguments in degrees) y = sin x, y = cos y = tax for positive values of k, and the trigonometric func		ŝ	N14			
Condition   Substitute   Subs	apply and interpret limits of accuracy   including upper and lower bounds		as ni			use inequality notation to specify simple error intervals due to	
Soundation   South	luding:  a2b in place of a  a2b in place of a  a2b in place of a  a separating products of two binomials separations and identities  butts and  including those involving surds  expanding products of two binomials  • expanding products of two or more binomials  Factorising quadratic expressions of the form ax2 + bx + c, including the difference of two squares  commulae;    know the difference between an equation and an identity; argue mathematically to show algebraic expressions are equivalent, and use algebra to support and construct arguments    know the difference between an equation and an identity; argue mathematically to show algebraic expressions are equivalent, and use algebra to support and construct arguments    interpret the reverse process as the 'inverse function interpret the succession of two functions as a 'composite function' (the use of formal function notation is expected)    ght-line graphs in of the line through two given points or through one point with a given gradient    identify and interpret roots, intercepts, turning points of quadratic functions graphically; deduce roots algebraically   and perpendicular lines    identify and interpret roots, intercepts, turning points of quadratic functions y × k for positive values of k, and the trigonometric functions (with arguments in degrees) y = sin x, y = cos: y = tan x for angles of any size		Σ		significant figures);		including upper and lawer hounds
use and interpret algebraic manipulation, including:  a bin place of a x b  3 yin place of y x y y and 3 x y  a 2 in place of a x b  in place of a	azb in place of a  as decimals  d expressions,  alary of s, terms and  identities  so by:  (including those involving surds - expanding products of two binomials - hactorising quadratic expressions of the form x2 + bx + c, including the difference of two squares  c  (including those involving surds - expanding products of two binomials - hactorising quadratic expressions of the form x2 + bx + c, including the difference of two squares  c  (including those involving surds - expanding products of two binomials - factorising quadratic expressions of the form x2 + bx + c, including the difference of two squares  c  (including those involving surds - expressions of two form ax2 + bx + c, including the difference of two squares  c  (including those involving surds - expressions of two or more binomials - expanding products of two or more binomi			INTO	Foundation		
expressions, equations, formulae, inequalities, terms and factors    Collecting like terms   Examplify and manipulate algebraic expressions by:   Collecting like terms   Examplify and manipulate algebraic expressions by:   Collecting like terms   Examplify and manipulate algebraic expressions by:   Collecting like terms   Examplify and manipulate algebraic expressions by:   Collecting like terms   Examplify and manipulate algebraic expressions by:   Collecting like terms   Examplify and manipulate algebraic expressions by:   Collecting like terms   Examplify and manipulate algebraic expressions by:   Collecting like terms   Examplify and manipulate algebraic expressions of two binomials   Examplify and powers, including the laws of indices     As   Understand and use standard mathematical formulae;   Examplify and an indentity and powers, including the laws of indices     As   Understand and use standard mathematical formulae;   Examplify and an identity and powers, including the laws of indices     As   Understand and use standard mathematical formulae;   Examplify and an identity and use algebraic expressions are equivalent, and use algebra to support and construct arguments.     As   Examplify and interpret simple expressions as functions   Understand and use algebraic expressions are equivalent, and interpret the succession of two function with inputs and outputs   Understand an use algebraic expressions are equivalent, and interpret the succession of two function interpret the succession of two function interpret the succession of two function is expected)	identities    Identities   Iden		c		<ul> <li>3y in place of y + y + y and 3 × y</li> <li>a2 in place of a × a, a3 in place of a × a × a, a2b in place of a × a × b</li> <li>in place of a ÷ b</li> <li>coefficients written as fractions rather than as decimals</li> </ul>		
expressions, equations, formulae, inequalities, terms and factors    Collecting like terms	identities  identities  including those involving surds  expanding products of two binomials  factorising quadratic expressions of the form x2 + bx + c, including the difference of two squares  including those involving surds  expanding products of two binomials  factorising quadratic expressions of the form x2 + bx + c, including the difference of two squares  including those involving surds  expanding products of two or more binomials factorising quadratic expressions of the form ax2 + c  including those involving surds  including products of two or more binomials factorising quadratic expressions of the form x2 + c  including those involving surds  including those including products of two or more binomials factorising quadratic expressions of tw		anipultic		substitute numerical values into formulae and expressions,		
A3   factors   simplify and manipulate algebraic expressions by:   Collecting like terms   multiplying a single term over a bracket   taking out common factors   expanding products of two binomials   expanding products of two or more bined if the difference of two squares   factorising quadratic expressions of the form x2 + bx + c, including the laws of indices   expanding products of two or more bined in the difference of two squares   factorising quadratic expressions of the form x2 + bx + c, including the laws of indices   factorising quadratic expressions of the difference of two squares   factorising quadratic expressions of the difference of two squares   factorising quadratic expressions of the difference between an equation and an identity; argue, mathematically to show algebraic expressions are equivalent, and use algebra to support and construct arguments   finterpret the reverse process as the finite interpret the succession of two functions with inputs and outputs   finterpret the reverse process as the finite interpret the succession of two functions of the fine through two given points or through one point with a given gradient   functions graphically and algebraically   finterpret gradients and intercepts of linear   functions graphically; deduce roots algebraically   functions graphically; deduce roots algebraically   functions (with arguments in degrees) y = y = tan x for angles of any size   y = tan x for angles of any size   y = tan x for angles of any size   y = tan x for angles of any size   y = tan x for angles of any size   y = tan x for angles of any size   y = tan x for angles of any size   y = tan x for angles of any size   y = tan x for angles of any size   y = tan x for angles of any size   y = tan x for angles of any size   y = tan x for angles of any size	identities    Identities						
Simplify and manipulate algebraic expressions by:   Collecting like terms   Collecting like likes   Collecting like likes   Collecting likes   Collec	Cincluding those involving surds   Expanding products of two binomials	1	a	А3		identities	
know the difference between an equation and an identity; argue mathematically to show algebraic expressions are equivalent, and use algebra to support and construct arguments.    A6	• expanding products of two binomials     • lactorising quadratic expressions of the form x2 + bx + c, including the difference of two squares  ormulae;    know the difference between an equation and an identity; argue mathematically to show algebraic expressions are equivalent, and use algebra to support and construct arguments.    know the difference between an equation and an identity; argue mathematically to show algebraic expressions are equivalent, and use algebra to support and construct arguments.    interpret the reverse process as the 'inverse function interpret the succession of two functions as a 'composite function' (the use of formal function notation is expected)    use the form y = mx + c to identify parallel lines; find the equation of the line through two given points or through one point with a given gradient    identify and interpret roots, intercepts, turning points of quadratic faunctions y = kx for positive values of k, and the trigonometric functions, y = tan x for angles of any size   values of k, and the trigonometric functions y = tan x for angles of any size   values of k, and the trigonometric functions or any size   values of any size   values of any size   values of k, and the trigonometric functions or y = tan x for angles of any size   values of k, and the trigonometric functions or y = tan x for angles of any size   values of k, and the trigonometric functions or y = tan x for angles of any size   values of k. and the trigonometric functions or y = tan x for angles of any size   values of k. and the trigonometric functions or y = tan x for angles of any size   values of k. and the trigonometric functions	J			simplify and manipulate algebraic expressions by:		
know the difference between an equation and an identity; argue mathematically to show algebraic expressions are equivalent, and use algebra to support and construct arguments.    About the corresponding to the succession of two functions with inputs and outputs   About the coordinates in all four quadrants	know the difference between an equation and an identity; argue mathematically to show algebraic expressions are equivalent, and use algebra to support and construct arguments.  and proofs interpret the reverse process as the 'inverse function interpret the succession of two functions as a 'composite function' (the use of formal function notation is expected)  ght-line graphs in given gradient  use the form y = mx + c to identify parallel lines; find the equation of the line through two given points or through one point with a given gradient  identify and interpret roots, intercepts, turning points of quadratic functions graphically; deduce roots algebraically  and turning points by completing the square exponential functions y = kx for positive values of k, and the trigonometric functions, y = tan x for angles of any size y = tan x for angles of any size				<ul> <li>multiplying a single term over a bracket</li> <li>taking out common factors</li> <li>simplifying expressions involving sums, products and</li> </ul>	<ul> <li>expanding products of two binomials</li> <li>factorising quadratic expressions of the form x2 + bx + c, including</li> </ul>	Expanding products of two or more binomials
know the difference between an equation and an identity; argue mathematically to show algebraic expressions are equivalent, and use algebra to support and construct arguments  where appropriate, interpret simple expressions as functions with inputs and outputs  A7 with inputs and outputs  A8 work with coordinates in all four quadrants  use the form y = mx + c to identify parallel lines; find the equation of the line through two given points or through one point with a given gradient  A10 functions graphically and algebraically  identify and interpret gradients and intercepts of linear functions graphically and algebraically  identify and interpret roots, intercepts, turning points of quadratic functions graphically, deduce roots algebraically  and turning points by completing the squ exponential functions  y = kx for positive values of k, and the trigunctions (with arguments in degrees) y = y = tan x for angles of any size  simple cubic functions, the reciprocal function y = 1/x with x ≠ 0	mathematically to show algebraic expressions are equivalent, and use algebra to support and construct arguments.  and proofs interpret the reverse process as the 'inverse function interpret the succession of two functions as a 'composite function' (the use of formal function notation is expected)  use the form y = mx + c to identify parallel lines; find the equation of the line through two given points or through one point with a given gradient  and perpendicular lines  identify and interpret roots, intercepts, turning points of quadratic functions graphically; deduce roots algebraically  and turning points by completing the square exponential functions  y = kx for positive values of k, and the trigonometric functions, y = tan x for angles of any size  y = tan x for angles of any size			A4	understand and use standard mathematical formulae;		
mathematically to show algebraic expressions are equivalent, and use algebra to support and construct arguments  where appropriate, interpret simple expressions as functions with inputs and outputs  A8 work with coordinates in all four quadrants	mathematically to show algebraic expressions are equivalent, and use algebra to support and construct arguments.  and proofs interpret the reverse process as the 'inverse function interpret the succession of two functions as a 'composite function' (the use of formal function notation is expected)  use the form y = mx + c to identify parallel lines; find the equation of the line through two given points or through one point with a given gradient  and perpendicular lines  identify and interpret roots, intercepts, turning points of quadratic functions graphically; deduce roots algebraically  and turning points by completing the square exponential functions  y = kx for positive values of k, and the trigonometric functions, y = tan x for angles of any size  y = tan x for angles of any size			A5	rearrange formulae to change the subject		
where appropriate, interpret simple expressions as functions  A7 with inputs and outputs  A8 work with coordinates in all four quadrants  Description of the line through two given points or through one point with a given gradient  A10 functions graphically and algebraically  Description of the line through two given points or through one point with a given gradient  Description of the line through two given points or through one point with a given gradient  Description of the line through two given points or through one point with a given gradient  Description of the line through two given points or through one point with a given gradient  Description of the line through two given points or through one point with a given gradient  Description of the line through two given points or through one point with a given gradient  Description of the use of forms notation is expected)  Description of the use of forms notation is expected)  Description of the use of forms notation is expected)  Description of the use of forms notation is expected)  Description of the use of forms notation is expected)  Description of the use of forms notation is expected)  Description of the use of forms notation is expected)  Description of the use of forms notation is expected)  Description of the use of forms notation is expected)  Description of the use of forms notation is expected)  Description of the use of forms notation is expected)  Description of the use of forms notation is expected)  Description of the use of forms notation is expected)  Description of the use of forms notation is expected)  Description of the use of forms notation is expected)  Description of the use of forms notation is expected)  Description of the use of forms notation is expected)  Description of the use of forms notation is expected)  Description of the use of forms notation is expected)  Description of the use of forms notation is expected.  Description of the use of forms notation is expected.  Description of the use of forms notation is expected.  De	interpret the reverse process as the 'inverse function interpret the succession of two functions as a 'composite function' (the use of formal function notation is expected)    use the form y = mx + c to identify parallel lines; find the equation of the line through two given points or through one point with a given gradient    identify and interpret roots, intercepts, turning points of quadratic functions graphically; deduce roots algebraically    and turning points by completing the square exponential functions   y = kx for positive values of k, and the trigonometric functions, y = tan x for angles of any size   y = tan x for angles of any size			A6		mathematically to show algebraic expressions are equivalent, and	
where appropriate, interpret simple expressions as functions with inputs and outputs  A8 work with coordinates in all four quadrants  plot graphs of equations that correspond to straight-line graphs in the coordinate plane; identify and interpret gradients and intercepts of linear functions graphically and algebraically  A11	ons as functions  'composite function' (the use of formal function notation is expected)  "use the form y = mx + c to identify parallel lines; find the equation of the line through two given points or through one point with a given gradient  st of linear    identify and interpret roots, intercepts, turning points of quadratic functions graphically; deduce roots algebraically    exponential functions   y = kx for positive values of k, and the trigonometric functions, we have functions, y = sin x, y = cos y = tan x for angles of any size    vomposite function (the use of formal function notation is expected)    and perpendicular lines   and turning points by completing the square	1					
A7 with inputs and outputs  A8 work with coordinates in all four quadrants  Description of the line through two given points or through one point with a given gradient  A10 functions graphically and algebraically  A11 description of the line through two given points or through one point with a given gradient  Description of the line through two given points or through one point with a given gradient  A11 description of the line through two given points or through one point with a given gradient  Description of the line through two given points or through one point with a given gradient  Description of the line through two given points or through one point with a given gradient  Description of the line through two given points or through one point with a given gradient  Description of the line through two given points or through one point with a given gradient  Description of the line through two given points or through one point with a given gradient  Description of the line through two given points or through one point with a given gradient  Description of the line through two given points or through one point with a given gradient  Description of the line through two given points or through one point with a given gradient  Description of the line through two given points or through one point with a given gradient  Description of the line through two given points or through one point with a given gradient  Description of the line through two given points or through one point with a given gradient  Description of the line through two given points or through one point with a given gradient  Description of the line through two given points or through one point with a given gradient  Description of the line through two given points or through one point with a given gradient  Description of the line through two given points or through one point with a given gradient  Description of the line through two given points or through one point with a given gradient  Description of the line through two given points or throu	is the form y = mx + c to identify parallel lines; find the equation of the line through two given points or through one point with a given gradient and perpendicular lines  identify and interpret roots, intercepts, turning points of quadratic functions graphically; deduce roots algebraically  and turning points by completing the square exponential functions  y = kx for positive values of k, and the trigonometric functions,  are functions,	- 1			where appropriate, interpret simple expressions as functions		
Use the form y = mx + c to identify parallel lines; find the equation of the line through two given points or through one point with a given gradient	ght-line graphs in given gradient  ts of linear  identify and interpret roots, intercepts, turning points of quadratic functions graphically; deduce roots algebraically  exponential functions  y = kx for positive values of k, and the trigonometric functions, we fair functions, y = tan x for angles of any size  y = tan x for angles of any size  y = tan x for angles of any size	L			with inputs and outputs		notation is expected)
plot graphs of equations that correspond to straight-line graphs in the coordinate plane; identify and interpret gradients and intercepts of linear functions graphically and algebraically  A10	ght-line graphs in given gradient  ts of linear  identify and interpret roots, intercepts, turning points of quadratic functions graphically; deduce roots algebraically  exponential functions  y = kx for positive values of k, and the trigonometric functions, y = tan x for angles of any size  y = tan x for angles of any size  y = tan x for angles of any size			A8	work with coordinates in all four quadrants	use the form y = mx + c to identify parallel lines: find the equation	
identify and interpret gradients and intercepts of linear functions graphically and algebraically  A11   Identify and interpret roots, intercepts, turning points of quadratic functions graphically; deduce roots algebraically   and turning points by completing the squexponential functions   y = kx for positive values of k, and the trif functions (with arguments in degrees) y = y = tan x for angles of any size   y = tan x for any size   y	identify and interpret roots, intercepts, turning points of quadratic functions graphically; deduce roots algebraically  and turning points by completing the square exponential functions  y = kx for positive values of k, and the trigonometric functions, (with arguments in degrees) y = sin x, y = cos y = tan x for angles of any size					of the line through two given points or through one point with a	
A10 functions graphically and algebraically    identify and interpret roots, intercepts, turning points of quadratic functions graphically; deduce roots algebraically    and turning points by completing the squ   exponential functions   y = kx for positive values of k, and the trig   functions (with arguments in degrees) y =   y = tan x for angles of any size   A12 quadratic functions,   simple cubic functions, the reciprocal function y = 1/x   with x ≠ 0	identify and interpret roots, intercepts, turning points of quadratic functions graphically; deduce roots algebraically  exponential functions  y = kx for positive values of k, and the trigonometric functions,  ear functions,  y = tan x for angles of any size  y = tan x for angles of any size			A9		given gradient	and perpendicular lines
identify and interpret roots, intercepts, turning points of quadratic functions graphically, deduce roots algebraically  and turning points by completing the sque exponential functions  y = kx for positive values of k, and the trig functions (with arguments in degrees) y = y = tan x for angles of any size  A12 quadratic functions,  simple cubic functions, the reciprocal function y = 1/x with x ≠ 0	functions graphically; deduce roots algebraically  exponential functions y = kx for positive values of k, and the trigonometric functions, (with arguments in degrees) y = sin x, y = cos y = tan x for angles of any size			A10			
exponential functions  y = kx for positive values of k, and the trig  functions (with arguments in degrees) y =  recognise, sketch and interpret graphs of linear functions,  all quadratic functions,  simple cubic functions, the reciprocal function y = 1/x with x ≠ 0	exponential functions  y = kx for positive values of k, and the trigonometric functions (with arguments in degrees) y = sin x, y = cos y = tan x for angles of any size	bra					
	ear functions, y = tan x for angles of any size			A11		tunctions graphically; deduce roots algebraically	exponential functions y = kx for positive values of k, and the trigonometric
		<u>g</u>	Graphs				
νο procedular interpret graphs and graphs of non-standard		₹		A12		simple cubic functions, the reciprocal function $y = 1/x$ with $x \ne 0$	
functions in real contexts to find approximate solutions to							
problems such as simple kinematic problems involving	involving				problems such as simple kinematic problems involving		
413 distance, speed and acceleration (including reciprocal graphs) sketch translations and reflections of a plot and interpret graphs and graphs of non-standard functions in				A13		(including reciprocal graphs)	sketch translations and reflections of a given funct
piot and interpret graphs and graphs of non-standard functions in real contexts to find approximate solutions to problems such as							
				1	simple kinematic problems involving distance, speed and	1	İ

A15  A16  A17  A18  A18  A18  A19  A19  A18  A19  A19	tic and other non-linear cases such as distance- has and graphs in  include calculus)  of a circle with centre  of a tangent to a circle  g those that require  ctorising, by completing  atic formula; find  h  uations  quations numerically  iable(s), and quadratic
generate terms of a sequence from either a term-to-term or a position-to-term rule  A23 position-to-term rule  Fibonacci type sequences, quadratic sequences, and simple geometric progressions (m where n is an integer, and r is a rational number > 0 or a surd) and of deduce expressions to calculate the n th term of linear sequences  Foundation  Both  Higher  change freely between related standard units (e.g. time, length, area, volume/capacity, mass) and compound units (e.g. speed, rates of pay, prices, ) in numerical contexts  Units in algebraic contexts	ctorising, by completing atic formula; find h
generate terms of a sequence from either a term-to-term or a position-to-term rule  A23 position-to-term rule  Fibonacci type sequences, quadratic sequences, and simple geometric progressions (rn where n is an integer, and r is a rational number > 0 or a surd) and of deduce expressions to calculate the n th term of linear sequences  Foundation  Both  Higher  Change freely between related standard units (e.g. time, length, area, volume/capacity, mass) and compound units (e.g. speed, rates of pay, prices,) in numerical contexts  Units in algebraic contexts	uations quations numerically iable(s), and quadratic
generate terms of a sequence from either a term-to-term or a position-to-term rule    A23	quations numerically
generate terms of a sequence from either a term-to-term or a position-to-term rule    A23	
generate terms of a sequence from either a term-to-term or a position-to-term rule    A23	
Foundation  Change freely between related standard units (e.g. time, length, area, volume/capacity, mass) and compound units (e.g. speed, rates  R1 of pay, prices, ) in numerical contexts  Miss in algebraic contexts  Units in algebraic contexts	
Foundation Both Higher  change freely between related standard units (e.g. time, length, area, volume/capacity, mass) and compound units (e.g. speed, rates  R1 of pay, prices, J in numerical contexts  Units in algebraic contexts	
area, volume/capacity, mass) and compound units (e.g. speed, rates  R1 of pay, prices, ) in numerical contexts  Units in algebraic contexts	r
ne use seare ractors, seare eragrams and maps	
express one quantity as a fraction of another, where the fraction is  R3 less than 1 or greater than 1  R4 use ratio notation, including reduction to simplest form	
divide a given quantity into two parts in a given part:part or part:whole ratio; express the division of a quantity into two parts as a ratio; apply ratio to real contexts and problems (such as those	
R5 involving conversion, comparison, scaling, mixing, concentrations) express a multiplicative relationship between two quantities as a R6 ratio or a fraction	
R7 understand and use proportion as equality of ratios R8 relate ratios to fractions and to linear functions	
define percentage as 'number of parts per hundred'; interpret percentages and percentage changes as a fraction or a decimal, and interpret these multiplicatively, express one quantity as a percentage of another; compare two quantities using percentages; work with percentage greater than 100%; solve problems involving percentage change, including percentage increase/decrease and original value problems, and simple interest including in financial mathematics  solve problems involving direct and inverse proportion, including graphical and algebraic representations	
R9 mathematics solve problems involving direct and inverse proportion, including graphical and algebraic representations	
R11 use compound units such as speed, rates of pay, unit pricing, density and pressure	
compare lengths, areas and volumes using ratio notation; ) and  R12 scale factors   make links to similarity (including trigonometric ratios	
understand that X is inversely proportional to Y is equivalent to X is proportional to Y is equivalent to X is proportional to y interpret equations that describe direct and inverse proportion construct and interpret interpret equations that describe direct and inverse proportion construct and interpret interpret equations.	quations that describe
R13  interpret the gradient of a straight line graph as a rate of change; recognise and interpret graphs that illustrate direct and inverse	
R14 proportion interpret the gradient at a point on instantaneous rate of change; apply average and instantaneous rate of chords and tangents) in numerical,	ly the concepts of f change (gradients of
R15 contexts (this does not include calcu	
R16 problems, including compound interest and work with general iterative providing to the problems of the pro	
use conventional terms and notation; points, lines, vertices, edges, planes, parallel lines, perpendicular lines, right angles, polygons, regular polygons and polygons with reflection and/or rotation symmetries; use the standard conventions for labelling and referring to the sides and angles of triangles; draw diagrams from written description	
use the standard ruler and compass constructions (perpendicular bisector of a line segment, constructing a perpendicular to a given line from/at a given point, bisecting a given angle): use these to construct given figures and solve loci problems; know that the perpendicular distance from a point to a line is the shortest distance.  62 to the line	
apply the properties of angles at a point, angles at a point on a straight line, vertically opposite angles; understand and use alternate and corresponding angles on parallel lines; derive and use	
the sum of angles in a triangle (e.g. to deduce and use the angle  G3 sum in any polygon, and to derive properties of regular polygons)  derive and apply the properties and definitions of special types of	
G3 sum in any polygon, and to derive properties of regular polygons)	

Description of the control of the co							
The control of the co		<u>ĕ</u> .					
Page 1900 Page 1		Έ					
The state of the control of the cont	41	e					
Page 1900 Page 1	re	Ö	G6				
The control of the co	<b>–</b>	_ ₽		identify, describe and construct congruent and similar shapes,			
The second control of the distance of the second control of the se	ĕ						
The state of the control of the cont	63		G7	translation and enlargement	(including fractional or negative scale factors)		
The control of control of the control of control of the control of	Ĭ						
The control of control of recovers and project of project of project, including control of the c	_		G8	identify and apply circle definitions and preperties, including:		combinations of rotations, reflections and translations	
The state of the control of the cont	Ø		G9		tangent, arc. sector and segment		
The state of the control of the cont	•		0,5	centre, radius, enora, diameter, encamierence	tangenty are sector and segment	apply and prove the standard circle theorems concerning	
The state of the property and analysis of generative graphs, including the property of the pro							
See the first depth of the of microur and employed concepts (legally histo.)  The state of the segments and experts and experts the control of the state of the segments and experts and e	ì					related results	
Set professional designation and controlled desi	ŭ		G11	solve geometrical problems on coordinate axes			
Set professional designation and controlled desi	-			identify properties of the faces surfaces edges and vertices of			
The second during of recovery and experts	2		G12				
The state of the property and analysis of generative graphs, including the property of the pro	3				construct and interpret plans and elevations of 3D shapes		
The contraction of the composite and ringing in grainers in General contractions and angles in grainers in General contractions and a single in grainers and a s				use standard units of measure and related concepts (length, area,			
Section   Part			G14	volume/capacity, mass, time, money, etc.)			
Section   Company   Comp				measure line segments and angles in geometric figures, including			
The state of apply for many and an apply for the control of color apply prioring prioring and the color apply apply and the color apply apply and the color apply and the color apply and the color apply and the color apply and the color apply apply apply and the color apply and the co			G15				
The state of the s			015				
women to formulate consultations of a consultation of an above the consultation of a							
Secretary   Secr		5	G16	(including cylinders)			
Secretary of the disease of aim Band con 9 for 19-17, 197, 457, 607 and 197, 198, 457, 607 and 198, 198, 198, 198, 198, 198, 198, 198,		ati					
Secretary of the disease of aim Band con 9 for 19-17, 197, 457, 607 and 197, 198, 457, 607 and 198, 198, 198, 198, 198, 198, 198, 198,		3	617				
Secretary of the disease of aim Band con 9 for 19-17, 197, 457, 607 and 197, 198, 457, 607 and 198, 198, 198, 198, 198, 198, 198, 198,		<u>s</u>		areas of circles and composite snapes;			
Secretary of the disease of aim Band con 9 for 19-17, 197, 457, 607 and 197, 198, 457, 607 and 198, 198, 198, 198, 198, 198, 198, 198,		2			zanzana di a rengano, angles and areas of sectors of circles	apply the concepts of congruence and similarity, including the	
Secretary of the disease of aim Band con 9 for 19-17, 197, 457, 607 and 197, 198, 457, 607 and 198, 198, 198, 198, 198, 198, 198, 198,		n a			apply the concepts of congruence and similarity, including the		
Secretary of the disease of aim Band con 9 for 19-17, 197, 457, 607 and 197, 198, 457, 607 and 198, 198, 198, 198, 198, 198, 198, 198,		Ęį	G19		relationships between lengths in similar figures		
Secretary of the disease of aim Band con 9 for 19-17, 197, 457, 607 and 197, 198, 457, 607 and 198, 198, 198, 198, 198, 198, 198, 198,		ra Ta					
Secretary of the disease of aim Band con 9 for 19-17, 197, 457, 607 and 197, 198, 457, 607 and 198, 198, 198, 198, 198, 198, 198, 198,		nst				unbana massible assessed belong to the torre and there	
Secretary of the disease of aim Band con 9 for 19-17, 197, 457, 607 and 197, 198, 457, 607 and 198, 198, 198, 198, 198, 198, 198, 198,		Me	G20				
1972   1972		_	G20		umensional rigures	differisional rigures	
22   Section of the control of the c					know the exact values of $\sin \theta$ and $\cos \theta$ for $\theta = 0^{\circ}$ , $30^{\circ}$ , $45^{\circ}$ , $60^{\circ}$ and		
C22   Substitute and specific control of the cont			G21				
23 describe translations as 20 vectors  150 pp							
Secretarian and process of the secretarian and process of the secretarian and substrates of exercise. In a color, and dispermental and colors representations of exercise. In a color, and dispermental and colors representations of exercise. In a color, and dispermental and colors representations of exercise. In a color, and dispermental and colors representations of exercise and exercise and expansive process. In a color, and dispermental and colors representations of exercise and exercise and expansive process. In a color, and the process of exercise and expansive process. In the process of exercise and exercise probability, unless one expensive exercise and combinations of sets systematically, unless of exercise and e			G22				
Section   Sect			622				
Foundation  P1 probability experiments and experiments and degrammatic and deg		_		describe translations as 2D vectors		sides of angles of any triangle	
P1 record, describe and analyse the frequency of automore of probability appertments using tables and frequency trees to calculate expected automore of multiple future experiments.  P2 apply does of randomness, fames and equally likely events to calculate expected automore of multiple future experiments.  P3 relate relative expected frequencies to theoretical probability, using appropriate impagage and the 2-1 probability scale.  P4 apply the reportery that the probability scale and automotive standard that empirical unbiased samples tend towards, theoretical probabilities of an enhancing sum to one, spely the property that the probability of an enhancing standard that empirical unbiased samples tend towards, theoretical probabilities of an enhancing standard that empirical unbiased samples tend towards, theoretical probabilities of an enhancing standard that empirical unbiased samples tend towards, theoretical probabilities of an enhancing standard that empirical unbiased samples tend towards, theoretical probabilities of an enhancing standard that empirical unbiased samples tend towards, theoretical probabilities of an enhancing standard that empirical unbiased samples tend towards, theoretical probabilities of an enhancing standard that empirical unbiased samples tend towards, theoretical probabilities of undividual probabilities of the standard probabilities of the standard probabilities of the standard probabilities of construct tables, stream of the standard probabilities of		ᅙ	G24	describe translations as 2D vectors	apply addition and subtraction of vectors, multiplication of vectors		
P1 record, describe and analyse the frequency of automore of probability appertments using tables and frequency trees to calculate expected automore of multiple future experiments.  P2 apply does of randomness, fames and equally likely events to calculate expected automore of multiple future experiments.  P3 relate relative expected frequencies to theoretical probability, using appropriate impagage and the 2-1 probability scale.  P4 apply the reportery that the probability scale and automotive standard that empirical unbiased samples tend towards, theoretical probabilities of an enhancing sum to one, spely the property that the probability of an enhancing standard that empirical unbiased samples tend towards, theoretical probabilities of an enhancing standard that empirical unbiased samples tend towards, theoretical probabilities of an enhancing standard that empirical unbiased samples tend towards, theoretical probabilities of an enhancing standard that empirical unbiased samples tend towards, theoretical probabilities of an enhancing standard that empirical unbiased samples tend towards, theoretical probabilities of an enhancing standard that empirical unbiased samples tend towards, theoretical probabilities of an enhancing standard that empirical unbiased samples tend towards, theoretical probabilities of undividual probabilities of the standard probabilities of the standard probabilities of the standard probabilities of construct tables, stream of the standard probabilities of		s ec					
P3 probability genements using labels and frequency of outcomes of multiple future reperiments  P3 apply ideas of randomness, fairness and equally likely events to excludite expected outcomes of multiple future experiments  P3 are later calculate expected outcomes of multiple future experiments  P4 apply ideas of randomness, fairness and equally likely events to excludite expected outcomes of multiple future experiments  P5 are later calculate expected outcomes of multiple future experiments  P6 outcomes un to one; apply the property that the probabilities of outcomes un to one; apply the property that the probabilities of outcomes un to one; apply the property that the probabilities of outcomes un to one; apply the property that the probabilities of outcomes un to one; apply the property that the probabilities of outcomes un to one; apply the property that the probabilities of outcomes un to one; apply the property that the probabilities of outcomes understand that empirical unbiased samples tend towards, theoretical probabilities of an educative set of multiple future experiments with equal and construct and probabilities of the properties of possibilities or construct probabilities of probabilities of the probabilities of the probabilities of the probabilities of probabilities of the pro		>	G25		vectors;	use vectors to construct geometric arguments and proofs	
probability experiments using tables and requesty rees  propriet and construct theoretical probabilities of an enhance or an observation of the construct theoretical probabilities of an enhance or an observation of the construct theoretical probabilities of an enhance or an observation of the construct theoretical probabilities of an enhance or an observation of the construct theoretical probabilities of an enhance or an observation of the construct theoretical probabilities of an enhance or an observation of the construct theoretical probabilities of an enhance or an observation of the entire dispersion of the construct theoretical probabilities of an enhance or an observation of the entire dispersion of the construct theoretical probability spaces for angle and combined event in the construct theoretical probabilities of an enhance or an observation of the entire dispersion of the entire of the entire dispersion of the entire dispersion of the entire of the entire entire of the entire entire of the entire ent				Foundation	Both	Higher	
probability apprentions using states and requesty trees  17 apply does or inadimens, famines and equally layey erest to calculate expected outcomes of multiple future experiments  18 prior the creative expected frequencies to the contectual probability, using appropriate leaguage and the 15 probability and properties of an exhaustive set of outcomes sum to our, spay the property that the probabilities of an exhaustive set of outcomes sum to our, spay the property that the probabilities of an exhaustive set of outcomes sum to our, spay the property that the probabilities of exhaustive set of multiple future experiments of exhaustive set of outcomes sum to our, spay the property that the probabilities of exhaustive set of multiple future experiments and exhaustive set of outcomes sum to our, spay the property that the probabilities of exhaustive set of multiple future experiments of exhaustive set of outcomes sum to our, spay the property that the probabilities of exhaustive set of set outcomes sum to our spay the property that the probabilities of exhaustive sets and combined to outcome sum to our spay the property that the probabilities of the pr			D1	record, describe and analyse the frequency of outcomes of			
restantiate expected outcomes of multiple future experiments page of the property that the probability vale page that is any use and the 0-1 probability vale page that is any use and the 1-1 probability vale page that is any understand that empirical unbiased samples tend towards the continuous sum to one page the property that the probabilities of an enhancitive set of multiple vacuative events sum to one page that is an enhancitive set of multiple vacuative events sum to one page tables, grids, Veron diagrams construct theoretical possibility exclusive events sum to one page tables, grids, Veron diagrams construct theoretical possibility spaces for single and combined events, including using tree diagrams and dependent combined events, including using tree diagrams and other representations, and know the underlying assumptions  Foundation  Both Higher  strenger and construct tables, charts and diagrams, including for frequency tables, but charts, per charts and diagrams, including for frequency tables, but charts, per charts and diagrams, including for frequency tables, but charts, per charts and propagate for categorical data, vertical line charts for ungrouped discrete numerical data, and know their appropriate use  strenger and construct tables, charts and diagrams, including the properties of populations of assimpling therefore and construct tables, charts and diagrams, including the properties of populations of adapting therefore and construct tables, charts and diagrams, including the properties of populations of adapting the properties of the properties o			P.I	probability experiments using tables and frequency trees			
restantiate expected outcomes of multiple future experiments page of the property that the probability vale page that is any use and the 0-1 probability vale page that is any use and the 1-1 probability vale page that is any understand that empirical unbiased samples tend towards the continuous sum to one page the property that the probabilities of an enhancitive set of multiple vacuative events sum to one page that is an enhancitive set of multiple vacuative events sum to one page tables, grids, Veron diagrams construct theoretical possibility exclusive events sum to one page tables, grids, Veron diagrams construct theoretical possibility spaces for single and combined events, including using tree diagrams and dependent combined events, including using tree diagrams and other representations, and know the underlying assumptions  Foundation  Both Higher  strenger and construct tables, charts and diagrams, including for frequency tables, but charts, per charts and diagrams, including for frequency tables, but charts, per charts and diagrams, including for frequency tables, but charts, per charts and propagate for categorical data, vertical line charts for ungrouped discrete numerical data, and know their appropriate use  strenger and construct tables, charts and diagrams, including the properties of populations of assimpling therefore and construct tables, charts and diagrams, including the properties of populations of adapting therefore and construct tables, charts and diagrams, including the properties of populations of adapting the properties of the properties o							
P3 relate relative expected frequencies to theoretical probability, using appropriate language and the 0.1 probability scale of appropriate language and the 0.1 probability scale of apply the property that the probabilities of an enhancive set of outcomes with one apply the property that the probabilities of an enhancive set of outcomes with one apply the property that the probabilities of an enhancive set of outcomes with one apply the property that the probabilities of an enhancive set of outcomes with one apply the property that the probabilities of an enhancive set of outcomes with one apply the property that the probabilities of an enhancive set of outcomes and use the set of a construct theoretical probability and the ediagrams and other representations, with increasing sample size and tree diagrams.  2 outcomes and use these to calculate the probability of independent and dependent combined experiments with equally likely outcomes and use these to calculate the probability of independent and dependent combined experiments with equally likely outcomes and use these to calculate the probability of independent and dependent combined experiments with equally likely outcomes and use these to calculate the probability of independent and dependent combined experiments with equally likely outcomes and use these to calculate the probability of independent and dependent combined experiments with equally likely outcomes and use these to calculate the probability of independent and dependent combined experiments with equally likely outcomes and use these to calculate the probability of independent and dependent combined experiments with equal for the suppression of the probabilities through the proposal transport of the proposal transp			PZ				
PS  appropriate language and the 0-1 probability scale  poly the property that the probabilities of an exhaustive set of outcomes with once apply the property that the probabilities of an exhaustive set of mutually exclusive events sum to on soph the property that the probabilities of an exhaustive set of mutually exclusive events sum to one poly tables, gries, them diagrams  construct theoretical possibility spaces for single and combined processing stables, gries, them diagrams  construct theoretical possibilities outcomes and use these to calculate theoretical probabilities  PB  pp  pp  pp  pp  pp  pp  pp  pp  pp				calculate expected datcomes of matupic rature experiments			
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 mutually exclusive events sum to one    PS							
outcomes sum to one; apply the property that the probabilities of an eshaustive set of mutually exclusive events sum to one and interpretation of the properties of mutually exclusive events sum to one and tree diagrams of the enumerate sets and combinations of sets systematically, using tables, grids, venn diagrams and tree diagrams and tree diagrams on construct theoretical probabilities of experiments with equally likely outcomes and use these to calculate the probability of independent and dependent combined experiments with equally likely outcomes and use these to calculate the probability of independent and dependent combined experiments with the experiments with two way tables, tree diagrams and other representations, and know the underlying assumptions  Foundation  f sample, while imitations from a sample, while imitations of sampling interpret and construct tables, tree diagrams and other representations and vener diagrams for grouped discrete data and know their appropriate use  Foundation of sampling interpretation foundation of data sets from university empirical distributions of data sets from universi			Р3				
outcomes sum to one; apply the property that the probabilities of an eshaustive set of mutually exclusive events sum to one and interpretation of the properties of mutually exclusive events sum to one and tree diagrams of the enumerate sets and combinations of sets systematically, using tables, grids, venn diagrams and tree diagrams and tree diagrams on construct theoretical probabilities of experiments with equally likely outcomes and use these to calculate the probability of independent and dependent combined experiments with equally likely outcomes and use these to calculate the probability of independent and dependent combined experiments with the experiments with two way tables, tree diagrams and other representations, and know the underlying assumptions  Foundation  f sample, while imitations from a sample, while imitations of sampling interpret and construct tables, tree diagrams and other representations and vener diagrams for grouped discrete data and know their appropriate use  Foundation of sampling interpretation foundation of data sets from university empirical distributions of data sets from universi			Р3				
an eshaustive set of mutually exclusive events sum to one    P5			Р3	appropriate language and the 0-1 probability scale			
hereretical probability distributions, with increasing sample size  not read lagrams  and tree diagrams  nd other representations, and know the underlying assumptions  Foundation  Foundation  Both  Interpret and construct tables, charts and diagrams, including interpret to populations or distributions from a sample, while knowing the limitations of sampling  interpret and construct tables, charts and diagrams, including frequency tables, bar charts, pie charts and pictograms for categorical data, wertical line charts for ungrouped discrete numerical data, and know their appropriate use  133  33  34  35  35  36  37  38  39  39  39  30  30  30  30  30  30  30				appropriate language and the 0-1 probability scale  apply the property that the probabilities of an exhaustive set of			
hereretical probability distributions, with increasing sample size  not read lagrams  and tree diagrams  nd other representations, and know the underlying assumptions  Foundation  Foundation  Both  Interpret and construct tables, charts and diagrams, including interpret to populations or distributions from a sample, while knowing the limitations of sampling  interpret and construct tables, charts and diagrams, including frequency tables, bar charts, pie charts and pictograms for categorical data, wertical line charts for ungrouped discrete numerical data, and know their appropriate use  133  33  34  35  35  36  37  38  39  39  39  30  30  30  30  30  30  30		ţ.		appropriate language and the 0-1 probability scale  apply the property that the probabilities of an exhaustive set of outcomes sum to one; apply the property that the probabilities of			
tables, griss, Venn dagarams  construct theoretical possibility spaces for single and combined experiments with equally likely outcomes and use these to calculate theoretical probabilities  representation with equality likely outcomes and use these to calculate theoretical probabilities  calculate the probability of independent and dependent combined events, including using tree diagrams and other representations, and know the underlying assumptions  calculate and interpret conditional probabilities through representation using expected frequencies with two-way tables, tree diagrams and Venn diagrams  Foundation  Soth  Infer properties of populations or distributions from a sample, while interpret and construct tables, charts and pictograms for categorical data, vertical line charts for ungrouped discrete numerical data, and know their appropriate use  interpret and construct tables, charts and pictograms for categorical data, vertical line charts for ungrouped discrete numerical data, and know their appropriate use.  construct and interpret diagrams for grouped discrete data and continuous data, i.e. histograms with equal and unequal class intervals and cumulative frequency graphs, and know their appropriate use.  construct and interpret diagrams for grouped discrete data and continuous data, i.e. histograms with equal and unequal class intervals and cumulative frequency graphs, and know their appropriate use.  construct and interpret diagrams for grouped discrete data and continuous data, i.e. histograms with equal and unequal class intervals and cumulative frequency graphs, and know their appropriate use.  construct and interpret diagrams for grouped discrete data and continuous data, i.e. histograms with equal and unequal class intervals and cumulative frequency graphs, and know their appropriate use.  construct and interpret diagrams for grouped discrete data and continuous and grouped data.  a appropriate empirical distributions through:  a propriate empirical distributions of data sets from univariate em		ility		appropriate language and the 0-1 probability scale  apply the property that the probabilities of an exhaustive set of outcomes sum to one; apply the property that the probabilities of			
tables, griss, Venn dagarams  construct theoretical possibility spaces for single and combined experiments with equally likely outcomes and use these to calculate theoretical probabilities  representation with equality likely outcomes and use these to calculate theoretical probabilities  calculate the probability of independent and dependent combined events, including using tree diagrams and other representations, and know the underlying assumptions  calculate and interpret conditional probabilities through representation using expected frequencies with two-way tables, tree diagrams and Venn diagrams  Foundation  Soth  Infer properties of populations or distributions from a sample, while interpret and construct tables, charts and pictograms for categorical data, vertical line charts for ungrouped discrete numerical data, and know their appropriate use  interpret and construct tables, charts and pictograms for categorical data, vertical line charts for ungrouped discrete numerical data, and know their appropriate use.  construct and interpret diagrams for grouped discrete data and continuous data, i.e. histograms with equal and unequal class intervals and cumulative frequency graphs, and know their appropriate use.  construct and interpret diagrams for grouped discrete data and continuous data, i.e. histograms with equal and unequal class intervals and cumulative frequency graphs, and know their appropriate use.  construct and interpret diagrams for grouped discrete data and continuous data, i.e. histograms with equal and unequal class intervals and cumulative frequency graphs, and know their appropriate use.  construct and interpret diagrams for grouped discrete data and continuous data, i.e. histograms with equal and unequal class intervals and cumulative frequency graphs, and know their appropriate use.  construct and interpret diagrams for grouped discrete data and continuous and grouped data.  a appropriate empirical distributions through:  a propriate empirical distributions of data sets from univariate em		ability	P4	appropriate language and the 0-1 probability scale  apply the property that the probabilities of an exhaustive set of outcomes sum to one; apply the property that the probabilities of			
tables, griss, Venn dagarams  construct theoretical possibility spaces for single and combined experiments with equally likely outcomes and use these to calculate theoretical probabilities  representation with equality likely outcomes and use these to calculate theoretical probabilities  calculate the probability of independent and dependent combined events, including using tree diagrams and other representations, and know the underlying assumptions  calculate and interpret conditional probabilities through representation using expected frequencies with two-way tables, tree diagrams and Venn diagrams  Foundation  Soth  Infer properties of populations or distributions from a sample, while interpret and construct tables, charts and pictograms for categorical data, vertical line charts for ungrouped discrete numerical data, and know their appropriate use  interpret and construct tables, charts and pictograms for categorical data, vertical line charts for ungrouped discrete numerical data, and know their appropriate use.  construct and interpret diagrams for grouped discrete data and continuous data, i.e. histograms with equal and unequal class intervals and cumulative frequency graphs, and know their appropriate use.  construct and interpret diagrams for grouped discrete data and continuous data, i.e. histograms with equal and unequal class intervals and cumulative frequency graphs, and know their appropriate use.  construct and interpret diagrams for grouped discrete data and continuous data, i.e. histograms with equal and unequal class intervals and cumulative frequency graphs, and know their appropriate use.  construct and interpret diagrams for grouped discrete data and continuous data, i.e. histograms with equal and unequal class intervals and cumulative frequency graphs, and know their appropriate use.  construct and interpret diagrams for grouped discrete data and continuous and grouped data.  a appropriate empirical distributions through:  a propriate empirical distributions of data sets from univariate em		obability	P4	appropriate language and the 0-1 probability scale  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 mutually exclusive events sum to one	understand that empirical unbiased samples tend towards		
P8    P8     P7		Probability	P4	appropriate language and the 0-1 probability scale 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 mutually exclusive events sum to one enumerate sets and combinations of sets systematically, using	understand that empirical unbiased samples tend towards theoretical probability distributions, with increasing sample size		
theoretical probabilities    P8		Probability	P4	appropriate language and the 0-1 probability scale  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 mutually exclusive events sum to one  enumerate sets and combinations of sets systematically, using tables, grids, Venn diagrams	understand that empirical unbiased samples tend towards theoretical probability distributions, with increasing sample size		
P8    Calculate the probability of independent and dependent combined events, including using tree diagrams and other representations, and know the underlying assumptions    P9		Probability	P4 P5 P6	appropriate language and the 0-1 probability scale  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 mutually exclusive events sum to one  enumerate sets and combinations of sets systematically, using tables, grids, Venn diagrams construct theoretical possibility spaces for single and combined	understand that empirical unbiased samples tend towards theoretical probability distributions, with increasing sample size		
P9   Solidate and interpret conditional probabilities through representation using expected frequencies with two-way tables, tree diagrams and venn diagrams.		Probability	P4 P5 P6	appropriate language and the 0-1 probability scale  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 mutually exclusive events sum to one  enumerate sets and combinations of sets systematically, using tables, grids, Venn diagrams construct theoretical possibility spaces for single and combined experiments with equally likely outcomes and use these to calculate	understand that empirical unbiased samples tend towards theoretical probability distributions, with increasing sample size		
Foundation  Foundation  Both  Infer properties of populations or distributions from a sample, while knowing the limitations of sampling  Interpret and construct tables, charts and diagrams, including frequency tables, bar charts, pie charts and pictograms for categorical data, vertical line charts for ungrouped discrete and know their appropriate use  Interpret, analyse and compare the distributions of data sets from univariate empirical distributions through:  a appropriate measures of central tendency (median, mean, mode and modal class) and spread (range, including consideration of outliers)  Sa  Sa  Sa  Sa  Sa  Sa  Sa  Sa  Sa  S		Probability	P4 P5 P6 P7	appropriate language and the 0-1 probability scale  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 mutually exclusive events sum to one  enumerate sets and combinations of sets systematically, using tables, grids, Venn diagrams construct theoretical possibility spaces for single and combined experiments with equally likely outcomes and use these to calculate	understand that empirical unbiased samples tend towards theoretical probability distributions, with increasing sample size and tree diagrams		
Foundation  Foundation  Both  Infer properties of populations or distributions from a sample, while knowing the limitations of sampling  interpret and construct tables, charts and diagrams, including frequency tables, bar charts, pie charts and pictograms for categorical data, vertical line charts for ungrouped discrete numerical data, and know their appropriate use  S3  S3  S3  S4  Interpret and construct tables, charts and pictograms for categorical data, vertical line charts for ungrouped discrete numerical data, and know their appropriate use  Construct and interpret diagrams for grouped discrete and continuous data, i.e. histograms with equal and unequal class intervals and cumulative frequency graphs, and know their appropriate use  Interpret, analyse and compare the distributions of data sets from univariate empirical distributions through:  appropriate measures of central tendency (median, mean, mode and modal class) and spread (range, including consideration of outliers)  S5  apply statistics to describe a population  S6  underpret and construct tables and line graphs for time series data and continuous data, i.e. histograms with equal and unequal class intervals and cumulative frequency graphs, and know their appropriate use  Interpret, analyse and compare the distributions of data sets from univariate empirical distributions through box plots  outliers)  Interpret, analyse and compare the distributions of data sets from univariate empirical distributions through box plots  outliers)  Appropriate measures of central tendency quartiles and inter-quartile range  S5  apply statistics to describe a population  and know that it does not indicate causation: draw estimated lines of best fit; make predictions; interpolate and extrapolate apparent.		Probability	P4 P5 P6 P7	appropriate language and the 0-1 probability scale  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 mutually exclusive events sum to one  enumerate sets and combinations of sets systematically, using tables, grids, Venn diagrams construct theoretical possibility spaces for single and combined experiments with equally likely outcomes and use these to calculate	understand that empirical unbiased samples tend towards theoretical probability distributions, with increasing sample size and tree diagrams  calculate the probability of independent and dependent combined events, including using tree diagrams and other representations,		
Foundation  Foundation  Both  Infer properties of populations or distributions from a sample, while knowing the limitations of sampling  interpret and construct tables, charts and diagrams, including frequency tables, bar charts, pie charts and pictograms for categorical data, vertical line charts for ungrouped discrete numerical data, and know their appropriate use  S3  S3  S3  S4  Interpret and construct tables, charts and pictograms for categorical data, vertical line charts for ungrouped discrete numerical data, and know their appropriate use  Construct and interpret diagrams for grouped discrete and continuous data, i.e. histograms with equal and unequal class intervals and cumulative frequency graphs, and know their appropriate use  Interpret, analyse and compare the distributions of data sets from univariate empirical distributions through:  appropriate measures of central tendency (median, mean, mode and modal class) and spread (range, including consideration of outliers)  S5  apply statistics to describe a population  S6  underpret and construct tables and line graphs for time series data and continuous data, i.e. histograms with equal and unequal class intervals and cumulative frequency graphs, and know their appropriate use  Interpret, analyse and compare the distributions of data sets from univariate empirical distributions through box plots  outliers)  Interpret, analyse and compare the distributions of data sets from univariate empirical distributions through box plots  outliers)  Appropriate measures of central tendency quartiles and inter-quartile range  S5  apply statistics to describe a population  and know that it does not indicate causation: draw estimated lines of best fit; make predictions; interpolate and extrapolate apparent.		Probability	P4 P5 P6 P7	appropriate language and the 0-1 probability scale  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 mutually exclusive events sum to one  enumerate sets and combinations of sets systematically, using tables, grids, Venn diagrams construct theoretical possibility spaces for single and combined experiments with equally likely outcomes and use these to calculate	understand that empirical unbiased samples tend towards theoretical probability distributions, with increasing sample size and tree diagrams  calculate the probability of independent and dependent combined events, including using tree diagrams and other representations,		
Foundation  Both  Infer properties of populations or distributions from a sample, while knowing the limitations of sampling  interpret and construct tables, charts and diagrams, including frequency tables, bar charts, pie charts and pictograms for categorical data, vertical line charts for ungrouped discrete numerical data, and know their appropriate use  33  interpret and construct tables and line graphs for time series data and continuous data, i.e. histograms with equal and unequal class intervals and cumulative frequency graphs, and know their appropriate use  interpret, analyse and compare the distributions of data sets from univariate empirical distributions through:  a papropriate measures of central tendency (median, mean, mode and modal class) and spread (range, including consideration of outliers)  55  apply statistics to describe a population  and know that it does not indicate causation; draw estimated lines. of best fit; make predictions; interpolate and extrapolate and extrapolate apparent.		Probability	P4 P5 P6 P7	appropriate language and the 0-1 probability scale  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 mutually exclusive events sum to one  enumerate sets and combinations of sets systematically, using tables, grids, Venn diagrams construct theoretical possibility spaces for single and combined experiments with equally likely outcomes and use these to calculate	understand that empirical unbiased samples tend towards theoretical probability distributions, with increasing sample size and tree diagrams  calculate the probability of independent and dependent combined events, including using tree diagrams and other representations,	calculate and interpret conditional probabilities through	
Foundation  Both  Higher  11  12  13  14  151  151  151  151  152  153  155  155		Probability	P4 P5 P6 P7	appropriate language and the 0-1 probability scale  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 mutually exclusive events sum to one  enumerate sets and combinations of sets systematically, using tables, grids, Venn diagrams construct theoretical possibility spaces for single and combined experiments with equally likely outcomes and use these to calculate	understand that empirical unbiased samples tend towards theoretical probability distributions, with increasing sample size and tree diagrams  calculate the probability of independent and dependent combined events, including using tree diagrams and other representations,		
Infer properties of populations or distributions from a sample, while knowing the limitations of sampling		Probability	P4 P5 P6 P7	appropriate language and the 0-1 probability scale  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 mutually exclusive events sum to one  enumerate sets and combinations of sets systematically, using tables, grids, Venn diagrams construct theoretical possibility spaces for single and combined experiments with equally likely outcomes and use these to calculate	understand that empirical unbiased samples tend towards theoretical probability distributions, with increasing sample size and tree diagrams  calculate the probability of independent and dependent combined events, including using tree diagrams and other representations,	representation using expected frequencies with two-way	
interpret and construct tables, charts and diagrams, including frequency tables, bar charts, pie charts and pictograms for categorical data, vertical line charts for ungrouped discrete numerical data, and know their appropriate use    S3		Probability	P4 P5 P6 P7	appropriate language and the 0-1 probability scale 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 mutually exclusive events sum to one enumerate sets and combinations of sets systematically, using tables, grids, Venn diagrams construct theoretical possibility spaces for single and combined experiments with equally likely outcomes and use these to calculate theoretical probabilities	understand that empirical unbiased samples tend towards theoretical probability distributions, with increasing sample size and tree diagrams  calculate the probability of independent and dependent combined events, including using tree diagrams and other representations, and know the underlying assumptions	representation using expected frequencies with two-way tables, tree diagrams and Venn diagrams	
S2   Interpret and construct tables, charts and diagrams, including frequency tables, bar charts, pie charts and pictograms for categorical data, vertical line charts for ungrouped discrete numerical data, and know their appropriate use   Interpret and construct tables and line graphs for time series data and continuous data, i.e. histograms with equal and unequal class intervals and cumulative frequency graphs, and know their appropriate use   Interpret, analyse and compare the distributions of data sets from univariate empirical distributions through:   *** appropriate graphical representation involving discrete, continuous and grouped data, appropriate measures of central tendency (median, mean, mode and modal class) and spread (range, including consideration of outliers)   S5   apply statistics to describe a population   S6   use and interpret scatter graphs of bivariate data; recognise   and know that it does not indicate causation; draw estimated lines of best fit; make predictions; interpolate and extrapolate apparent.		Probability	P4 P5 P6 P7 P8	appropriate language and the 0-1 probability scale 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 mutually exclusive events sum to one enumerate sets and combinations of sets systematically, using tables, grids, Venn diagrams construct theoretical possibility spaces for single and combined experiments with equally likely outcomes and use these to calculate theoretical probabilities	understand that empirical unbiased samples tend towards theoretical probability distributions, with increasing sample size and tree diagrams  calculate the probability of independent and dependent combined events, including using tree diagrams and other representations, and know the underlying assumptions  Both	representation using expected frequencies with two-way tables, tree diagrams and Venn diagrams	
Frequency tables, bar charts, pie charts and pictograms for categorical data, vertical line charts for ungrouped discrete numerical data, and know their appropriate use  S3  S3  S4  interpret, analyse and compare the distributions of data sets from univariate empirical distributions through:  • appropriate measures of central tendency (median, mean, mode and modal class) and spread (range, including consideration of outliers)  S5  apply statistics to describe a population  S6  use and interpret scatter graphs of bivariate data; recognise  of best fit; make predictions; interpolate and extrapolate apparent.		Probability	P4 P5 P6 P7 P8	appropriate language and the 0-1 probability scale 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 mutually exclusive events sum to one enumerate sets and combinations of sets systematically, using tables, grids, Venn diagrams construct theoretical possibility spaces for single and combined experiments with equally likely outcomes and use these to calculate theoretical probabilities	understand that empirical unbiased samples tend towards theoretical probability distributions, with increasing sample size and tree diagrams  calculate the probability of independent and dependent combined events, including using tree diagrams and other representations, and know the underlying assumptions  Both  infer properties of populations or distributions from a sample, while	representation using expected frequencies with two-way tables, tree diagrams and Venn diagrams	
categorical data, vertical line charts for ungrouped discrete numerical data, and know their appropriate use  s3  categorical data, vertical line charts for ungrouped discrete and know their appropriate use  construct and interpret diagrams for grouped discrete data and continuous data, i.e. histograms with equal and unequal class intervals and cumulative frequency graphs, and know their appropriate use  interpret, analyse and compare the distributions of data sets from univariate empirical distributions through:  appropriate graphical representation involving discrete, continuous and grouped data,  appropriate measures of central tendency (median, mean, mode and modal class) and spread (range, including consideration of outliers)  s4  s55  apply statistics to describe a population  sand know that it does not indicate causation: draw estimated lines of best fit: make predictions, interpolate and extrapolate apparent.		Probability	P4 P5 P6 P7 P8	appropriate language and the 0-1 probability scale 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 mutually exclusive events sum to one enumerate sets and combinations of sets systematically, using tables, grids, Venn diagrams construct theoretical possibility spaces for single and combined experiments with equally likely outcomes and use these to calculate theoretical probabilities  Foundation	understand that empirical unbiased samples tend towards theoretical probability distributions, with increasing sample size and tree diagrams  calculate the probability of independent and dependent combined events, including using tree diagrams and other representations, and know the underlying assumptions  Both  infer properties of populations or distributions from a sample, while	representation using expected frequencies with two-way tables, tree diagrams and Venn diagrams	
numerical data, and know their appropriate use  S3  S3  Interpret, analyse and compare the distributions of data sets from univariate empirical distributions through:  a appropriate graphs and a compare the distributions of data sets from univariate empirical distributions through:  a appropriate graphs and a compare the distributions of data sets from univariate empirical distributions through:  a appropriate graphs and compare the distributions of data sets from univariate empirical distributions through:  a propropriate graphs and a compare the distributions of data sets from univariate empirical distributions through box plots  sets from univariate empirical distributions through box plots  Appropriate measures of central tendency (median, mean, mode and modal class) and spread (range, including consideration of outliers)  S5  apply statistics to describe a population  and know that it does not indicate causation; draw estimated lines of best fit: make predictions; interpolate and extrapolate apparent.		Probability	P4  P5  P6  P7  P8  P9	appropriate language and the 0-1 probability scale 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 mutually exclusive events sum to one enumerate sets and combinations of sets systematically, using tables, grids, Venn diagrams construct theoretical possibility spaces for single and combined experiments with equally likely outcomes and use these to calculate theoretical probabilities  Foundation  interpret and construct tables, charts and diagrams, including	understand that empirical unbiased samples tend towards theoretical probability distributions, with increasing sample size and tree diagrams  calculate the probability of independent and dependent combined events, including using tree diagrams and other representations, and know the underlying assumptions  Both  infer properties of populations or distributions from a sample, while	representation using expected frequencies with two-way tables, tree diagrams and Venn diagrams	
construct and interpret diagrams for grouped discrete data and continuous data, i.e. histograms with equal and unequal class intervals and cumulative frequency graphs, and know their appropriate use  linterpret, analyse and compare the distributions of data sets from univariate empirical distributions through:  appropriate graphical representation involving discrete, continuous and grouped data, appropriate measures of central tendency (median, mean, mode and modal class) and spread (range, including consideration of outliers)  Solutions  and know that it does not indicate causation: draw estimated lines of best fit; make predictions; interpolate and extrapolate apparent.		Probability	P4  P5  P6  P7  P8  P9	appropriate language and the 0-1 probability scale 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 mutually exclusive events sum to one enumerate sets and combinations of sets systematically, using tables, grids, Venn diagrams construct theoretical possibility spaces for single and combined experiments with equally likely outcomes and use these to calculate theoretical probabilities  Foundation  interpret and construct tables, charts and diagrams, including frequency tables, bar charts, pie charts and pictograms for	understand that empirical unbiased samples tend towards theoretical probability distributions, with increasing sample size and tree diagrams  calculate the probability of independent and dependent combined events, including using tree diagrams and other representations, and know the underlying assumptions  Both  infer properties of populations or distributions from a sample, while knowing the limitations of sampling	representation using expected frequencies with two-way tables, tree diagrams and Venn diagrams	
and continuous data, i.e. histograms with equal and unequal class intervals and cumulative frequency graphs, and know their appropriate use  interpret, analyse and compare the distributions of data sets from univariate empirical distributions through:  a appropriate graphical representation involving discrete, continuous and grouped data, a appropriate graphical representation involving discrete, continuous and grouped data, b appropriate graphical representation involving discrete, continuous and grouped data, c appropriate graphical class) and spread (range, including consideration of outliers)  Interpret, analyse and compare the distributions of data sets from univariate empirical distributions through box plots  Appropriate measures of central tendency quartiles and inter-quartile range  S5 apply statistics to describe a population  soft best fit: make predictions; interpolate and extrapolate apparent.		Probability	P4  P5  P6  P7  P8  P9	appropriate language and the 0-1 probability scale 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 mutually exclusive events sum to one enumerate sets and combinations of sets systematically, using tables, grids, Venn diagrams construct theoretical possibility spaces for single and combined experiments with equally likely outcomes and use these to calculate theoretical probabilities  Foundation  interpret and construct tables, charts and diagrams, including frequency tables, bar charts, pie charts and pictograms for categorical data, vertical line charts for ungrouped discrete	understand that empirical unbiased samples tend towards theoretical probability distributions, with increasing sample size and tree diagrams  calculate the probability of independent and dependent combined events, including using tree diagrams and other representations, and know the underlying assumptions  Both  infer properties of populations or distributions from a sample, while knowing the limitations of sampling	representation using expected frequencies with two-way tables, tree diagrams and Venn diagrams	
interpret, analyse and compare the distributions of data sets from univariate empirical distributions through:  a appropriate graphical representation involving discrete, continuous and grouped data, a propriate graphical distributions through box plots  sadd and alclass) and spread (range, including consideration of outliers)  S5 apply statistics to describe a population  S6 use and interpret scatter graphs of bivariate data; recognise  and know that it does not indicate causation; draw estimated lines of best fit: make predictions; interpolate and extrapolate apparent.		Probability	P4  P5  P6  P7  P8  P9	appropriate language and the 0-1 probability scale 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 mutually exclusive events sum to one enumerate sets and combinations of sets systematically, using tables, grids, Venn diagrams construct theoretical possibility spaces for single and combined experiments with equally likely outcomes and use these to calculate theoretical probabilities  Foundation  interpret and construct tables, charts and diagrams, including frequency tables, bar charts, pie charts and pictograms for categorical data, vertical line charts for ungrouped discrete	understand that empirical unbiased samples tend towards theoretical probability distributions, with increasing sample size and tree diagrams  calculate the probability of independent and dependent combined events, including using tree diagrams and other representations, and know the underlying assumptions  Both  infer properties of populations or distributions from a sample, while knowing the limitations of sampling	representation using expected frequencies with two-way tables, tree diagrams and Venn diagrams  Higher	
appropriate measures of central tendency (median, mean, mode and modal class) and spread (range, including consideration of outliers)  Appropriate measures of central tendency quartiles and inter-quartile range  S5 apply statistics to describe a population  S6 use and interpret scatter graphs of bivariate data; recognise of best fit; make predictions; interpolate and extrapolate apparent.		Prob	P4  P5  P6  P7  P8  P9  S1	appropriate language and the 0-1 probability scale 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 mutually exclusive events sum to one enumerate sets and combinations of sets systematically, using tables, grids, Venn diagrams construct theoretical possibility spaces for single and combined experiments with equally likely outcomes and use these to calculate theoretical probabilities  Foundation  interpret and construct tables, charts and diagrams, including frequency tables, bar charts, pie charts and pictograms for categorical data, vertical line charts for ungrouped discrete	understand that empirical unbiased samples tend towards theoretical probability distributions, with increasing sample size and tree diagrams  calculate the probability of independent and dependent combined events, including using tree diagrams and other representations, and know the underlying assumptions  Both  infer properties of populations or distributions from a sample, while knowing the limitations of sampling	representation using expected frequencies with two-way tables, tree diagrams and Venn diagrams  Higher  construct and interpret diagrams for grouped discrete data and continuous data, i.e. histograms with equal and	
appropriate measures of central tendency (median, mean, mode and modal class) and spread (range, including consideration of outliers)  Appropriate measures of central tendency quartiles and inter-quartile range  S5 apply statistics to describe a population  S6 use and interpret scatter graphs of bivariate data; recognise of best fit; make predictions; interpolate and extrapolate apparent.		Prob	P4  P5  P6  P7  P8  P9  S1	appropriate language and the 0-1 probability scale 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 mutually exclusive events sum to one enumerate sets and combinations of sets systematically, using tables, grids, Venn diagrams construct theoretical possibility spaces for single and combined experiments with equally likely outcomes and use these to calculate theoretical probabilities  Foundation  interpret and construct tables, charts and diagrams, including frequency tables, bar charts, pie charts and pictograms for categorical data, vertical line charts for ungrouped discrete	understand that empirical unbiased samples tend towards theoretical probability distributions, with increasing sample size and tree diagrams  calculate the probability of independent and dependent combined events, including using tree diagrams and other representations, and know the underlying assumptions  Both  infer properties of populations or distributions from a sample, while knowing the limitations of sampling	representation using expected frequencies with two-way tables, tree diagrams and Venn diagrams  Higher  construct and interpret diagrams for grouped discrete data and continuous data, i.e. histograms with equal and unequal class intervals and cumulative frequency graphs,	
appropriate measures of central tendency (median, mean, mode and modal class) and spread (range, including consideration of outliers)  Appropriate measures of central tendency quartiles and inter-quartile range  S5 apply statistics to describe a population  S6 use and interpret scatter graphs of bivariate data; recognise of best fit; make predictions; interpolate and extrapolate apparent.		Prob	P4  P5  P6  P7  P8  P9  S1	appropriate language and the 0-1 probability scale 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 mutually exclusive events sum to one enumerate sets and combinations of sets systematically, using tables, grids, Venn diagrams construct theoretical possibility spaces for single and combined experiments with equally likely outcomes and use these to calculate theoretical probabilities  Foundation  interpret and construct tables, charts and diagrams, including frequency tables, bar charts, pie charts and pictograms for categorical data, vertical line charts for ungrouped discrete numerical data, and know their appropriate use	understand that empirical unbiased samples tend towards theoretical probability distributions, with increasing sample size and tree diagrams  calculate the probability of independent and dependent combined events, including using tree diagrams and other representations, and know the underlying assumptions  Both  infer properties of populations or distributions from a sample, while knowing the limitations of sampling	representation using expected frequencies with two-way tables, tree diagrams and Venn diagrams  Higher  construct and interpret diagrams for grouped discrete data and continuous data, i.e. histograms with equal and unequal class intervals and cumulative frequency graphs,	
appropriate measures of central tendency (median, mean, mode and modal class) and spread (range, including consideration of outliers)  Appropriate measures of central tendency quartiles and inter-quartile range  S5 apply statistics to describe a population  S6 use and interpret scatter graphs of bivariate data; recognise  and know that it does not indicate causation; draw estimated lines of best fit; make predictions; interpolate and extrapolate apparent.		Prob	P4  P5  P6  P7  P8  P9  S1	appropriate language and the 0-1 probability scale 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 mutually exclusive events sum to one enumerate sets and combinations of sets systematically, using tables, grids, Venn diagrams construct theoretical possibility spaces for single and combined experiments with equally likely outcomes and use these to calculate theoretical probabilities  Foundation  interpret and construct tables, charts and diagrams, including frequency tables, bar charts, pie charts and pictograms for categorical data, vertical line charts for ungrouped discrete numerical data, and know their appropriate use  interpret, analyse and compare the distributions of data sets from	understand that empirical unbiased samples tend towards theoretical probability distributions, with increasing sample size and tree diagrams  calculate the probability of independent and dependent combined events, including using tree diagrams and other representations, and know the underlying assumptions  Both  infer properties of populations or distributions from a sample, while knowing the limitations of sampling	representation using expected frequencies with two-way tables, tree diagrams and Venn diagrams  Higher  construct and interpret diagrams for grouped discrete data and continuous data, i.e. histograms with equal and unequal class intervals and cumulative frequency graphs, and know their appropriate use	
appropriate measures of central tendency (median, mean, mode and modal class) and spread (range, including consideration of outliers)  Appropriate measures of central tendency quartiles and inter-quartile range  S5 apply statistics to describe a population  S6 use and interpret scatter graphs of bivariate data; recognise  and know that it does not indicate causation; draw estimated lines of best fit; make predictions; interpolate and extrapolate apparent.		Prob	P4  P5  P6  P7  P8  P9  S1	appropriate language and the 0-1 probability scale 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 mutually exclusive events sum to one enumerate sets and combinations of sets systematically, using tables, grids, Venn diagrams construct theoretical possibility spaces for single and combined experiments with equally likely outcomes and use these to calculate theoretical probabilities  Foundation  interpret and construct tables, charts and diagrams, including frequency tables, bar charts, pie charts and pictograms for categorical data, vertical line charts for ungrouped discrete numerical data, and know their appropriate use  interpret, analyse and compare the distributions of data sets from univariate empirical distributions through:	understand that empirical unbiased samples tend towards theoretical probability distributions, with increasing sample size and tree diagrams  calculate the probability of independent and dependent combined events, including using tree diagrams and other representations, and know the underlying assumptions  Both  infer properties of populations or distributions from a sample, while knowing the limitations of sampling	representation using expected frequencies with two-way tables, tree diagrams and Venn diagrams  Higher  construct and interpret diagrams for grouped discrete data and continuous data, i.e. histograms with equal and unequal class intervals and cumulative frequency graphs, and know their appropriate use  Interpret, analyse and compare the distributions of data	
outliers)  S5 apply statistics to describe a population  S6 use and interpret scatter graphs of bivariate data; recognise of best fit; make predictions; interpolate and extrapolate apparent.		Prob	P4  P5  P6  P7  P8  P9  S1  S2	appropriate language and the 0-1 probability scale 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 mutually exclusive events sum to one enumerate sets and combinations of sets systematically, using tables, grids, Venn diagrams construct theoretical possibility spaces for single and combined experiments with equally likely outcomes and use these to calculate theoretical probabilities  Foundation  interpret and construct tables, charts and diagrams, including frequency tables, bar charts, pie charts and pictograms for categorical data, vertical line charts for ungrouped discrete numerical data, and know their appropriate use  interpret, analyse and compare the distributions of data sets from univariate empirical distributions through: • appropriate graphical representation involving discrete,	understand that empirical unbiased samples tend towards theoretical probability distributions, with increasing sample size and tree diagrams  calculate the probability of independent and dependent combined events, including using tree diagrams and other representations, and know the underlying assumptions  Both  infer properties of populations or distributions from a sample, while knowing the limitations of sampling	representation using expected frequencies with two-way tables, tree diagrams and Venn diagrams  Higher  construct and interpret diagrams for grouped discrete data and continuous data, i.e. histograms with equal and unequal class intervals and cumulative frequency graphs, and know their appropriate use  Interpret, analyse and compare the distributions of data sets from univariate empirical distributions through box	
S5 apply statistics to describe a population  and know that it does not indicate causation; draw estimated lines of best fit; make predictions; interpolate and extrapolate apparent.		Prob	P4  P5  P6  P7  P8  P9  S1  S2	appropriate language and the 0-1 probability scale 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 mutually exclusive events sum to one enumerate sets and combinations of sets systematically, using tables, grids, Venn diagrams construct theoretical possibility spaces for single and combined experiments with equally likely outcomes and use these to calculate theoretical probabilities  Foundation  Foundation  interpret and construct tables, charts and diagrams, including frequency tables, bar charts, pie charts and pictograms for categorical data, vertical line charts for ungrouped discrete numerical data, and know their appropriate use  interpret, analyse and compare the distributions of data sets from univariate empirical distributions through: appropriate graphical representation involving discrete, continuous and grouped data, appropriate measures of central tendency (median, mean, mode	understand that empirical unbiased samples tend towards theoretical probability distributions, with increasing sample size and tree diagrams  calculate the probability of independent and dependent combined events, including using tree diagrams and other representations, and know the underlying assumptions  Both  infer properties of populations or distributions from a sample, while knowing the limitations of sampling	representation using expected frequencies with two-way tables, tree diagrams and Venn diagrams  Higher  construct and interpret diagrams for grouped discrete data and continuous data, i.e. histograms with equal and unequal class intervals and cumulative frequency graphs, and know their appropriate use  Interpret, analyse and compare the distributions of data sets from univariate empirical distributions through box plots	
and know that it does not indicate causation; draw estimated lines use and interpret scatter graphs of bivariate data; recognise  and know that it does not indicate causation; draw estimated lines of best fit; make predictions; interpolate and extrapolate apparent		Prob	P4  P5  P6  P7  P8  P9  S1  S2	appropriate language and the 0-1 probability scale 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 mutually exclusive events sum to one enumerate sets and combinations of sets systematically, using tables, grids, Venn diagrams construct theoretical possibility spaces for single and combined experiments with equally likely outcomes and use these to calculate theoretical probabilities  Foundation  interpret and construct tables, charts and diagrams, including frequency tables, bar charts, pie charts and pictograms for categorical data, vertical line charts for ungrouped discrete numerical data, and know their appropriate use  interpret, analyse and compare the distributions of data sets from univariate empirical distributions through: • appropriate graphical representation involving discrete, continuous and grouped data, • appropriate measures of central tendency (median, mean, mode and modal class) and spread (range, including consideration of	understand that empirical unbiased samples tend towards theoretical probability distributions, with increasing sample size and tree diagrams  calculate the probability of independent and dependent combined events, including using tree diagrams and other representations, and know the underlying assumptions  Both  infer properties of populations or distributions from a sample, while knowing the limitations of sampling	representation using expected frequencies with two-way tables, tree diagrams and Venn diagrams  Higher  construct and interpret diagrams for grouped discrete data and continuous data, i.e. histograms with equal and unequal class intervals and cumulative frequency graphs, and know their appropriate use  Interpret, analyse and compare the distributions of data sets from univariate empirical distributions through box plots  Appropriate measures of central tendency quartiles and	
and know that it does not indicate causation; draw estimated lines use and interpret scatter graphs of bivariate data; recognise  and know that it does not indicate causation; draw estimated lines of best fit; make predictions; interpolate and extrapolate apparent		Prob	P4  P5  P6  P7  P8  P9  S1  S2	appropriate language and the 0-1 probability scale 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 mutually exclusive events sum to one enumerate sets and combinations of sets systematically, using tables, grids, Venn diagrams construct theoretical possibility spaces for single and combined experiments with equally likely outcomes and use these to calculate theoretical probabilities  Foundation  interpret and construct tables, charts and diagrams, including frequency tables, bar charts, pie charts and pictograms for categorical data, vertical line charts for ungrouped discrete numerical data, and know their appropriate use  interpret, analyse and compare the distributions of data sets from univariate empirical distributions through: • appropriate graphical representation involving discrete, continuous and grouped data, • appropriate measures of central tendency (median, mean, mode and modal class) and spread (range, including consideration of	understand that empirical unbiased samples tend towards theoretical probability distributions, with increasing sample size and tree diagrams  calculate the probability of independent and dependent combined events, including using tree diagrams and other representations, and know the underlying assumptions  Both  infer properties of populations or distributions from a sample, while knowing the limitations of sampling	representation using expected frequencies with two-way tables, tree diagrams and Venn diagrams  Higher  construct and interpret diagrams for grouped discrete data and continuous data, i.e. histograms with equal and unequal class intervals and cumulative frequency graphs, and know their appropriate use  Interpret, analyse and compare the distributions of data sets from univariate empirical distributions through box plots  Appropriate measures of central tendency quartiles and	
use and interpret scatter graphs of bivariate data; recognise of best fit; make predictions; interpolate and extrapolate apparent		Prob	P4 P5 P6 P7 P8 P9 S1 S2 S3	appropriate language and the 0-1 probability scale 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 mutually exclusive events sum to one enumerate sets and combinations of sets systematically, using tables, grids, Venn diagrams construct theoretical possibility spaces for single and combined experiments with equally likely outcomes and use these to calculate theoretical probabilities  Foundation  interpret and construct tables, charts and diagrams, including frequency tables, bar charts, pie charts and pictograms for categorical data, vertical line charts for ungrouped discrete numerical data, and know their appropriate use  interpret, analyse and compare the distributions of data sets from univariate empirical distributions through: - appropriate graphical representation involving discrete, continuous and grouped data, - appropriate measures of central tendency (median, mean, mode and modal class) and spread (range, including consideration of outliers)	understand that empirical unbiased samples tend towards theoretical probability distributions, with increasing sample size and tree diagrams  calculate the probability of independent and dependent combined events, including using tree diagrams and other representations, and know the underlying assumptions  Both  infer properties of populations or distributions from a sample, while knowing the limitations of sampling	representation using expected frequencies with two-way tables, tree diagrams and Venn diagrams  Higher  construct and interpret diagrams for grouped discrete data and continuous data, i.e. histograms with equal and unequal class intervals and cumulative frequency graphs, and know their appropriate use  Interpret, analyse and compare the distributions of data sets from univariate empirical distributions through box plots  Appropriate measures of central tendency quartiles and	
use and interpret scatter graphs of bivariate data; recognise of best fit; make predictions; interpolate and extrapolate apparent		Prob	P4 P5 P6 P7 P8 P9 S1 S2 S3	appropriate language and the 0-1 probability scale 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 mutually exclusive events sum to one enumerate sets and combinations of sets systematically, using tables, grids, Venn diagrams construct theoretical possibility spaces for single and combined experiments with equally likely outcomes and use these to calculate theoretical probabilities  Foundation  interpret and construct tables, charts and diagrams, including frequency tables, bar charts, pie charts and pictograms for categorical data, vertical line charts for ungrouped discrete numerical data, and know their appropriate use  interpret, analyse and compare the distributions of data sets from univariate empirical distributions through: - appropriate graphical representation involving discrete, continuous and grouped data, - appropriate measures of central tendency (median, mean, mode and modal class) and spread (range, including consideration of outliers)	understand that empirical unbiased samples tend towards theoretical probability distributions, with increasing sample size and tree diagrams  calculate the probability of independent and dependent combined events, including using tree diagrams and other representations, and know the underlying assumptions  Both  infer properties of populations or distributions from a sample, while knowing the limitations of sampling	representation using expected frequencies with two-way tables, tree diagrams and Venn diagrams  Higher  construct and interpret diagrams for grouped discrete data and continuous data, i.e. histograms with equal and unequal class intervals and cumulative frequency graphs, and know their appropriate use  Interpret, analyse and compare the distributions of data sets from univariate empirical distributions through box plots  Appropriate measures of central tendency quartiles and	
correlation trends while knowing the dangers of so doing		Prob	P4  P5  P6  P7  P8  P9  S1  S2  S3	appropriate language and the 0-1 probability scale 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 mutually exclusive events sum to one enumerate sets and combinations of sets systematically, using tables, grids, Venn diagrams construct theoretical possibility spaces for single and combined experiments with equally likely outcomes and use these to calculate theoretical probabilities  Foundation  interpret and construct tables, charts and diagrams, including frequency tables, bar charts, pie charts and pictograms for categorical data, vertical line charts for ungrouped discrete numerical data, and know their appropriate use  interpret, analyse and compare the distributions of data sets from univariate empirical distributions through: - appropriate graphical representation involving discrete, continuous and grouped data, - appropriate measures of central tendency (median, mean, mode and modal class) and spread (range, including consideration of outliers)	understand that empirical unbiased samples tend towards theoretical probability distributions, with increasing sample size and tree diagrams  calculate the probability of independent and dependent combined events, including using tree diagrams and other representations, and know the underlying assumptions  Both  infer properties of populations or distributions from a sample, while knowing the limitations of sampling  interpret and construct tables and line graphs for time series data and know their appropriate use.	representation using expected frequencies with two-way tables, tree diagrams and Venn diagrams  Higher  construct and interpret diagrams for grouped discrete data and continuous data, i.e. histograms with equal and unequal class intervals and cumulative frequency graphs, and know their appropriate use  Interpret, analyse and compare the distributions of data sets from univariate empirical distributions through box plots  Appropriate measures of central tendency quartiles and	
		Prob	P4  P5  P6  P7  P8  P9  S1  S2  S3	appropriate language and the 0-1 probability scale 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 mutually exclusive events sum to one enumerate sets and combinations of sets systematically, using tables, grids, Venn diagrams construct theoretical possibility spaces for single and combined experiments with equally likely outcomes and use these to calculate theoretical probabilities  Foundation  interpret and construct tables, charts and diagrams, including frequency tables, bar charts, pie charts and pictograms for categorical data, vertical line charts for ungrouped discrete numerical data, and know their appropriate use  interpret, analyse and compare the distributions of data sets from univariate empirical distributions through: a appropriate graphical representation involving discrete, continuous and grouped data, a parporpriate measures of central tendency (median, mean, mode and modal class) and spread (range, including consideration of outliers)  apply statistics to describe a population  use and interpret scatter graphs of bivariate data; recognise	understand that empirical unbiased samples tend towards theoretical probability distributions, with increasing sample size and tree diagrams  calculate the probability of independent and dependent combined events, including using tree diagrams and other representations, and know the underlying assumptions  Both  infer properties of populations or distributions from a sample, while knowing the limitations of sampling  interpret and construct tables and line graphs for time series data and know their appropriate use.	representation using expected frequencies with two-way tables, tree diagrams and Venn diagrams  Higher  construct and interpret diagrams for grouped discrete data and continuous data, i.e. histograms with equal and unequal class intervals and cumulative frequency graphs, and know their appropriate use  Interpret, analyse and compare the distributions of data sets from univariate empirical distributions through box plots  Appropriate measures of central tendency quartiles and	