



St Matthias Maths Curriculum Overview



Intent - At St Matthias, we believe in the power of maths to change children's lives. Being a confident mathematician enables children to navigate and solve real-life problems. We are committed to equipping all of our pupils with the necessary knowledge and understanding to succeed mathematically, both in their next phase of education and beyond.

We have designed our maths curriculum with our children's long-term futures in mind, laying the foundations they will need for future employment and to be financially literate citizens. As teachers who are passionate about maths, we want our children to know that the maths they learn has the potential to unlock doors in their futures as scientists, engineers and designers. We also believe that, like a love of literature, a love of maths – its patterns and its power – is a fundamental right for all children. We are unwaveringly ambitious for all pupils in our maths curriculum.

When children leave St Matthias to take their next steps as mathematicians, we ensure that they are confident in the three strands of fluency, reasoning and problem solving.

EYFS

Counting & Cardinality		Comparison	Composition	Shape and Spatial Awareness	Measure	Patterns
Autumn Term	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6
	The Establishment Phase	Introduce maths into routines	Mastering Number W1 Subitising with 3	Mastering Number W2 Counting, cardinality & ordinality to 5	Mastering Number W3 Composition 3 & 4	Mastering Number W4 Subitising 2&3
	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
	Mastering Number W5 Comparing of sets	Patterns (see Reception planning guidance)	Mastering Number W6 Counting, cardinality & ordinality to 5	Mastering Number W7 Comparing of sets	Mastering Number W8 Composition 2 & 3	Mastering Number W9 Composition 3,4,5
	Week 13	Week 14	Week 15			

	Mastering Number W10 Counting, cardinality & ordinality to 10	Mastering Number W11 Subitising 1-5	Shape (see Reception planning guidance)			
Spring Term	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6
	Mastering Number W12 Counting, cardinality & ordinality to 1-5	Mastering Number W13 Composition 5	Mastering Number W14 Composition 6 & 7	Mastering Number W15 Comparing of sets	Mastering Number W16 Counting, cardinality & ordinality	Review Patterns (see Reception planning guidance)
	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
	Mastering Number W17 Comparing of numbers to 8	Mastering Number W18 Composition 7	Mastering Number W19 Composition doubles	Mastering Number W20 Composition odd & even	Mastering Number W21 Counting, cardinality & ordinality unseen	Mastering Number W22 Subitising 6
Summer Term	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6
	Mastering Number W23 Composition 7	Mastering Number W24 Composition 10	Mastering Number W25 Comparison linked to ordinality	Mastering Number W26 Subitise to 5	Length (see Reception planning guidance)	Mastering Number W26 Review Subitise to 5
	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
	Mastering Number W27 Counting beyond 20	Mastering Number W28 Patterns within numbers to 10	Mastering Number W29 Number bonds to 5	Capacity (see Reception planning guidance)	Mastering Number W30 Understanding numbers to 10	Mastering Number W31 Compare numbers to 10
	Week 13	Week 13				
	Weight (see Reception planning guidance)	Review				

Year 1-Year 6 Ready to Progress Strands

NPV Number & Place Value	NF Number Facts	AS Addition & Subtraction	MD Multiplication & Division	G Geometry	F Fractions	Other Part of the National Curriculum, but not included in the DfE Guidance 2020
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Year 1

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12	
Autumn Term	Counting with 100							Comparing quantities – part whole relationships (1NPV-1) (1NPV-2)			<u>Composition of numbers 0 – 5</u> (1NPV-1) (1AS-1)		
	<i>Counting , recognising and comparing numbers 0 – 10 (1NPV-1)</i>			<i>Counting to and from 20 (1NPV-1)</i>		<i>Counting in tens – decade numbers (1NPV-1)</i>	<i>Pattern in counting from 20 – 100 (1NPV1-1)</i>				<u>Ready to Progress</u> Complete 1NPV-1: Count within 100, forwards and backwards, starting with any number		
Spring Term	Recognise, compose and decompose and manipulate 2D and 3D shapes (1G-1) (1G-2)			Composition of numbers 6-10 (1NPV-2) (1AS-1)			Additive Structures			Addition and subtraction facts within 10 (1NF-1)			
							<i>Addition (1AS-2)</i>		<i>Addition & Subtraction (1AS-2)</i>				
	<u>Ready to Progress</u> *Complete 1G-1: Recognise common 2D and 3D shapes presented in different orientations, and know that rectangles, triangles, cuboids and pyramids are not always similar to one another *Complete 1G-2 Compose 2D and 3D shapes from smaller shapes to match an example, including manipulating shapes to place them in particular orientations			<u>Ready to Progress</u> Complete 1AS-1: Compose numbers to 10 from 2 parts, and partition numbers to 10 into parts,including recognising odd and even numbers			<u>Ready to Progress</u> Complete 1AS-2: Read, write and interpret equations containing addition, subtraction and equals symbols, and relate additive expressions and equations to real life contexts						
Summer Term	Addition and subtraction facts within 10 (continued)	Composition of numbers 11 to 19 (1NPV-2)		Numbers 0 to 20 in different contexts (1NPV-2)		Unitising and Coin Recognition						Position & Direction (including fractions of turns)	Time (sequencing events and telling time to the nearest hour and half hour)
	<i>Counting in 2s, 5s and 10s (1NF-2)</i>					<i>Value of a set of coins (1NF-2)</i>		<i>Problem solving in a range of contexts (1NF-2)</i>					
	<u>Ready to Progress</u> Complete NF-1: Develop Fluency in addition and subtraction facts within 10			<u>Ready to Progress</u> Complete 1NPV-2: Reason about the location of any 2-digit number in the linear number system, including identifying the previous and next multiple of 10.		<u>Ready to Progress</u> Complete 1NF-2: Count forwards and backwards in multiples of 2,5 and 10, up to 10 multiples, beginning with any multiple, and count forwards and backwards through the odd numbers							

Year 2

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12	
Autumn Term	Numbers 10 to 100				Secure fluency and subtraction facts within 10 (2NF-1)	Calculating within 20 (2AS-1) (2AS-2)			Adding and subtracting ones and tens to and from 2-digit numbers (2AS-3)			Introduction to multiplication Grouping objects in different ways and relating to multiplication (2MD-1)	
	Composition of multiples of 10 (2NPV-1) (2NPV-2)		Counting and representing the numbers 20 99 (2NPV-1) (2NPV-2)	Comparing, ordering and partitioning 2-digit numbers (2NPV-1) (2NPV-2)									
	Ready to Progress Complete 2NPV-1: Recognise the place value of each digit in two-digit numbers, and compose and decompose two-digit numbers using standard and non-standard partitioning Complete 2NPV-2: Reason about the location of any two digit number in the linear number system, including identifying the previous and next multiple of 10				Ready to Progress Complete 2NF-1: Secure fluency of addition and subtraction facts within 10	Ready to Progress Complete 2AS-1: Add and subtract across 10 *Complete: 2AS-2 Recognise the subtraction structure of 'difference' and answer questions of the form, "How many more...?"			Ready to Progress Complete 2AS-3: Add and subtract within 100 by applying related one digit addition and subtraction facts: add and subtract only ones or only tens to/from a two digit number				
Spring Term	Introduction to multiplication						Introduction to division structures (2MD-2)		Shape: discuss and compare 2D and 3D shapes (2G-1)		Addition and subtraction of two 2 digit numbers		
	Representing counting in 2s, 5s and 10s as the 2, 5 and 10 times tables (2MD-1)		Representing counting in 5s as the 5 times table and link to the 10 times tables (2MD-1)		Multiplying by 2, doubling and halving (factors and products) (2MD-1)		Ready to Progress Complete 2MD-2: Relate grouping problems where the number of groups is unknown to multiplication equations with a missing factor, and to division equations (quotative division)		Ready to Progress Complete 2G-1: use precise language to describe the properties of 2D and 3D shapes, and compare shapes by reasoning about similarities and differences in properties		Ready to Progress 2AS-4: Add and subtract within 100 by applying related one-digit addition and subtraction facts: add and subtract any 2 two-digit numbers – complete summer week 1))		
	Ready to Progress Complete 2MD1: Recognise repeated addition contexts, representing them with multiplication equations and calculating the product, within the 2,5 and 10 multiplication tables												
Summer Term	Addition and subtraction of two 2 digit numbers - continued Complete 2AS-4	Money (Recognise coins and use £ and p symbols)	Fractions (Identify equal parts and be familiar with halves, thirds and quarters)		Time (Write and tell the time to five minutes)	Position & Direction		Doubling & Halving - quotative and partitive division		Sense of measure – capacity, volume and mass			

Year 3

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Autumn Term	Adding and Subtracting across 10 (3NF-1) (3AS-1)		Numbers to 1000									
			Securing place value to 100 and applying to addition and subtraction (3NPV-1) (3NPV-2) (3AS-1)		Bridging 100: counting on and back in 10s, adding/subtracting multiples of 10 (3NPV-1)(3NPV-2) (3NPV-3) (3NF-3)		Measuring length and recording in tables (3NPV4)		Representing 3-digit numbers, comparing and positioning on number lines (3NPV-2) (3NPV-3)		Measures: mass and capacity (3NPV-4)	
	<u>Ready to Progress</u> Complete 3NF-1: Secure fluency in addition and subtraction facts that bridge 10, through continued practice		<u>Ready to Progress</u> Complete 3AS-1: Add and subtract across 10		<u>Ready to Progress</u> Complete 3NPV1: Know that 10 tens are equivalent to 1 hundred, and that 100 is ten times the size of 10; apply this to identify and work out how many 10s there are in other 3 digit numbers		<u>Ready to Progress</u> Complete 3NPV2: Recognise the place value of digits in 3-digit numbers, and compose and decompose 3-digit numbers using standard and non-standard partitioning Complete 3NPV3: Reason about the location of any 3-digit number in the linear number system, including identifying the previous and next multiple of 100 and 10.		<u>Ready to Progress</u> Complete 3NPV4: Divide 100 into 2, 4, 5 and 10 equal parts, and read scales/number lines marked in multiples of 100 with 2, 4, 5 and 10 equal parts.			
Spring Term	Right angles (3G-1)		Manipulating the additive relationship and securing mental calculation				Column addition (3AS-2)		2, 4 and 8 times tables (using times tables to solve problems) (3MD-1) (3NF-2) (3NF-3)		Column subtraction (3AS-2)	
	<u>Ready to Progress</u> Complete 3G-1: Recognise right angles as a property of shape or a description of a turn, and identify right angles in 2D shapes presented in different contexts.		Informal and mental strategies for adding and subtracting two 3 digit numbers (3AS-3)		Understanding additive relationships and apply them to rearrange equations (3AS-3)				<u>Ready to Progress</u> Complete 3MD-1: Apply known multiplication and division facts to solve contextual problems with different structures, including quotitive and partitive division.		<u>Ready to Progress</u> Complete 3AS-2: Add and subtract up to 3-digit numbers using columnar methods.	
			<u>Ready to Progress</u> Complete 3AS-3: Manipulate the additive relationship – understand the inverse relationship between addition and subtraction, and how both relate to the part-part-whole structure Understand and use the commutative property of addition, and understand the related property for subtraction.									
Summer Term	Unit Fractions					Non-unit Fractions				Parallel and perpendicular sides in polygons (and perimeter) (3G2)		Time Tell the time to the nearest minute and compare units of time
	Unit fractions as part of a whole (3F-1)		Identify parts and wholes in different contexts (3F-1)	Compare and order unit fractions (3F-1)	Calculate the value of a part (3F-2) 		Non-unit fractions (introduction) (3F-1) (3F-3)		Composition of non-unit fractions: addition and subtraction (3F-4)			
					<u>Ready to Progress</u> Complete 3F-2: Find unit fractions of quantities using known division facts (multiplication tables fluency)		<u>Ready to Progress</u> Complete 3F-1: Interpret and write proper fractions to represent 1 or several parts of a whole that is divided into equal parts *Complete 3F-3: Reason about the location of any fraction within 1 in the linear number system		<u>Ready to Progress</u> Complete 3F-4: Add and subtract fractions with the same denominator, within 1		<u>Ready to Progress</u> Complete 3G-2: Draw polygons by joining marked points, and identify parallel and perpendicular sides.	

Year 4

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Autumn Term	Review of Column Addition & Subtraction (3AS-2)			Numbers to 10,000				Perimeter		3, 6, 9 Times Tables		
				Secure place value to 1000: apply to addition and subtraction: multiples of 100	Calculation and conversion of measures (4NPV1) (4NPV2) (NPV3) (NPV4)	Compare, order and round 4-digit numbers (NPV1) (NPV2) (NPV3)	Column addition and subtraction with 4-digit numbers (NF3) (NPV4)	<u>Ready to Progress</u> Complete 4G-2 Identify regular polygons, including equilateral triangles and squares, as those in which the side-lengths are equal and the angles are equal. Find the perimeter of regular and irregular polygons.	Represent counting in 3s and 6s as the 3x and 6x tables (4NF-4)	Relationship between the 3 and 6x tables and tests for divisibility (4NF-4)	Represent counting in 9s as the 9x table (4NF-4)	
	<u>Ready to Progress</u> Complete 3AS-2: Add and subtract up to 3-digit numbers using columnar methods.			<u>Ready to Progress</u> <i>Complete NPV1: Know that 10 hundreds are equivalent to 1 thousand, and that 1000 is 10 times the size of 100; apply this to identify and work out how many 100s there are in other 4 digit numbers</i> <i>Complete NPV 2: Recognise the place value of each digit in in 4-digit numbers, and compose and decompose 4-digit numbers using standard and non-standard partitioning</i> Complete NPV-3: Reason about the location of any 4-digit number in the linear number system, including identifying the previous and next multiple of 1000 and 100, and rounding to the nearest of each		<u>Ready to Progress</u> Complete NF3: Apply place value knowledge to known additive and multiplicative number facts (scaling facts by 100) Complete NPV4: Divide 1000 into 2, 4, 5 and 10 equal parts, and read scales/number lines marked in multiples of 1000 with 2, 4, 5 and 10 equal parts						
Spring Term	x3,6,9s	7 times tables & patterns		Understanding and manipulating multiplicative relationships				Coordinates 4G-1		Review of fractions (3F-1: See Y3)	Fractions greater than 1 (Composition of fractions greater than 1) (4F-2)	
	Relationship between the 3 and 9x tables (4NF-4)	7 times table: odd and even patterns, square numbers and tests of divisibility (4NF-4)		Understand and represent multiplicative structures (4MD-2)	Apply the distributive law to multiplication (4MD-3)	Understand what happens what happens when a number is multiplied or divided by 10 and 100 (4MD-1) (4NF-3)						
	<u>Ready to Progress</u> Complete 4NF-4: Recall multiplication and division facts up to 12x12, and recognise products in multiplication tables as multiples of the corresponding number.		<u>Ready to Progress</u> Complete 4MD-2: Manipulate multiplication and division equations, and understand and apply the commutative property of multiplication	<u>Ready to Progress</u> Complete 4MD 3: Understand and apply the distributive property of multiplication	<u>Ready to Progress</u> Complete 4MD1: Multiply and divide whole numbers by 10 and 100 (keeping to whole number quotients); understand this as an equivalent to making a number 10 or 100 times the size Complete 4NF-3: Apply place-value knowledge to known additive and multiplicative number facts (scaling facts by 100)		<u>Ready to Progress</u> Complete 4G-1: Draw polygons, specified by coordinates in the first quadrants, and translate within the first quadrant					
Summer Term	Fractions greater than 1				Properties of 2D and 3D					Time		
	Compare and order	Addition and	Convert improper	Efficient strategies								

	mixed numbers and position on a number line (4F-1)	subtraction of fractions and mixed numbers (within a whole) (4F-3)	fractions to mixed numbers and vice versa (4F-2)	for adding and subtracting mixed numbers (crossing a whole) (4F-3)	shapes and symmetry (4G-3)	Division with remainders (4NF-2)	(Convert between 12 and 24 hour clocks: analogue and digital)	
	<u>Ready to Progress</u> Complete 4F-1: Interpret and write proper fractions to represent 1 or several parts of a whole that is divided into equal parts.		<u>Ready to Progress</u> Complete 4F-2: Convert mixed numbers to improper fractions and vice versa	<u>Ready to Progress</u> Complete 4F-3: Add and subtract improper and mixed fractions with the same denominator, including bridging whole numbers	<u>Ready to Progress</u> Complete 4G-3: Identify line of symmetry in 2D shapes presented in different orientations. Reflect shapes in a line of symmetry and complete a symmetric figure or pattern with respect to a specified line of symmetry	<u>Ready to Progress</u> Complete 4NF-2: Solve division problems, with 2-digit dividends and 1-digit divisors, that involve remainders		

Year 5

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Autumn Term	Decimal Fractions					Money (Apply efficient strategies when calculating money)	Negative Numbers Counting, comparing and calculating	Short multiplication & division				
	Understand tenths as part of a whole, represent and calculate mentally (5NPV-1) (5NF -2)	Compose and calculate with decimals including column addition and subtraction (NPV-2)	Understand hundredths as parts of a whole and represent (5NPV-1) (5NPV2) 5NF-2)	Use knowledge of decimals to solve problems in different contexts: length (NPV-4)	Multiplication by partitioning leading to short multiplication (3 by 1-digit) (5MD-3)			Multiplication by partitioning leading to short multiplication (3 by 1-digit) (5MD-3) **Include multiplying 3x2 and 4x2 digit numbers	Division by partitioning leading to short division (2 and 3-digits by 1-digit) (5MD-4)			
	<u>Ready to Progress</u> Complete 5NPV-1: Know that 10 tenths are equivalent to 1 one, and that 1 is 10 times the size of 0.1 Know that 100 hundredths are equivalent to 1 one, and that 1 is 100 times the size of 0.01 Know that 10 hundredths are equivalent to 1 one, and that 0.1 is ten times the size of 0.01 Complete 5NF-2: Apply place value knowledge to known additive and multiplicative number facts (scaling facts by 1 tenth or 1 hundredth)			<u>Ready to Progress</u> Complete 4NPV-4: Divide 1 into 2, 4, 5 and 10 equal parts, and read scales/ number lines marked in units of 1 with 2, 4, 5 and 10 equal parts				<u>Ready to Progress</u> Complete: MD5-3: Multiply any whole number with up to 4-digits by any one-digit number using a formal written method.				
	SM&D (continued)		Area and Scaling					Calculating with decimal			Factors, Multiples and Primes	

Spring Term	Division by partitioning leading to short division (2 and 3-digits by 1-digit) – continued (5MD-4)		Understand the Concept of Scaling	Link area of rectangles to multiplication		Compare and describe measurements using knowledge of multiplication and division	fractions (5MD-1)		Understand the concept of volume (MD-2)	Multiply 3 or more numbers (commutative and associative laws) (MD-2)
	<u>Ready to Progress</u> Complete 5MD-4: Divide a number with up to 4 digits by a 1-digit number using a formal written method, and interpret remainders appropriately for the context		<u>Ready to Progress</u> Complete 5G-2: Compare areas and calculate the area of rectangles (including squares) using standard units				<u>Ready to Progress</u> Complete 5MD-1: Multiply and divide numbers by 10 and 100; understand this as an equivalent to making a number 10 or 100 times the size, or 1 tenth or 1 hundredth times the size.			
Summer Term	Factors, Multiples and Primes		Fractions					Converting units (NPV-5)	Angles (compare, name, estimate and measure) (5G-1)	
	Understand and use the concept of factorisation (square and prime numbers) (MD-2)	Use common factors and multiples to solve calculations efficiently (MD-2)	Multiply a proper fraction by a whole number	Multiply improper fractions and mixed numbers by a whole number	Find unit and non-unit fractions of whole numbers exploring parts and wholes (5F-1)	Comparing fractions using equivalence and decimals (F-2) (NPV-5)				
	<u>Ready to Progress</u> Complete 5MD-2: Find factors and multiples of positive whole numbers, including common factors and common multiples, and express a given number as a product of 2 or 3 factors					<u>Ready to Progress</u> Complete 5F-1: Find non-unit fractions of quantities	<u>Ready to Progress</u> Complete 5F-2: Find equivalent fractions and understand that they have the same value and the same position in the linear number system	<u>Ready to Progress</u> Complete 5NPV-5: Convert between units of measure, including using common decimals and fractions	<u>Ready to Progress</u> Complete 5G-1: Compare angles, estimate and measure angles in degrees and draw angles of a given size	

Year 6

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Autumn Term	Calculating using knowledge of structures						Multiples of 1,000 (Composition and calculation: multiples of 1,000 up to 1,000,000)		Numbers up to 10,000,000			
	Calculating using knowledge of structures (6AS/MD-1)		Use equivalence and compensation to simplify and solve subtraction problems (6AS/MD-1)			Use equivalence and compensation to simplify and solve subtraction problems (6AS/MD-1)			Understand place value within numbers with up to 7 digits (6NPV-1)	Order, compare and calculate with numbers up to 8 digits (6NPV-2) (6NPV-3)		Rounding and solving problems with numbers up to 7 digits (NPV-4)

	<u>Ready to Progress</u> Complete 6AS/MD-1: Understand that 2 numbers can be related additively or multiplicatively, and quantify additive and multiplicative relationships (multiplicative relationships restricted to multiplication by a whole number)			<u>Ready to Progress</u> Complete 6NPV-1: Understand the relationship between powers of 10 from 1 hundredth to 10 million, and use this to make a given number 10, 100, 1000, 1 tenth, 1 hundredth or 1 thousandth the size (multiply and divide by 10, 100 and 1000) Complete 6NPV-2: Recognise the place value of each digit in numbers up to 10 million, including decimal fractions, and compose and decompose numbers up to 10 million using standard and non-standard partitioning Complete 6NPV-3: Reason about the location of any number up to 10 million, including decimal fractions, in the linear number system, and round numbers, as appropriate, including in contexts Complete 6NPV-4: Divide powers of 10, from 1 hundredth to 10 million, into 2, 4, and 10 equal parts, and read scales/number lines with labelled intervals divided into 2, 4, 5 and 10 equal parts				
Spring Term	Draw, compose and decompose shapes (6G-1)	Multiplication and Division		Area, perimeter, position and direction	Fractions and Percentages)			
	<u>Ready to Progress</u> Complete 6G-1: Draw, compose and decompose shapes according to given properties, including dimensions, angles and area, and solve related problems	Using evidence to calculate (6AS/MD 2)	Multiplying and dividing by 2-digit numbers (6AS/MD-2)		Addition and subtraction of fractions (6F-1)	Comparing fractions (6F-2) (6F-3)	Multiplication and division of fractions	
<u>Ready to Progress</u> Complete 6AS/MD -2 Use a given additive or multiplicative calculation to derive or complete a related calculation, using arithmetic properties, inverse relationships, and place-value understanding.			<u>Ready to Progress</u> Complete 6F-1: Recognise when fractions can be simplified, and use common factors to simplify fractions	<u>Ready to Progress</u> Complete 6F-2: Express fractions in a common denominator and use this to compare fractions that are similar in value				
Summer Term	Understanding percentages	Statistics	National Testing Window	Calculating using knowledge of equivalence in addition and subtraction (6AS/MD-2)	Solving problems with two unknowns	Order of Operations	Mean Average	Consolidation
			Ratio and Proportion (10 lessons) (6AS/MD-2)		(application of algebra) (6AS/MD4)			
			<u>Ready to Progress</u> Complete 6AS/MD2: Use a given additive or multiplicative calculation to derive or complete a related calculation, using arithmetic properties, inverse relationships, and place value understanding		<u>Ready to Progress</u> Complete 6AS/MD-4: Solve problems with two unknowns			