	National Curriculum Statement	All students		
		Fluency	**Reasoning**	**Problem Solving**
Algebra	Find pairs of numbers that satisfy an equation with two unknowns.	• X and Y are whole numbers. X is a one digit number. Y is a two digit number. X + Y = 25. Find all the possible pairs of numbers that satisfy the equation. • a and b are variables: a + b = 6 Find 5 different possibilities for a and b. a | b | | | | | | | | | | • Find 3 different possible pairs of values for a and b: ab= 18 1) a= b= 2) a= b= 3) a= b=	• Rhian is solving the equation a + b = 18 a and b are both positive whole numbers. Rhian says, "a and b must both always be less than 18." Do you agree? Explain your reasoning. • Toby is finding a pair of numbers to fit the equation: 2a + b = 15 Both letters represent whole numbers. Toby says, "One of the numbers must be odd and one must be even," Do you agree with Toby? Show your reasoning.	• a and b stand for whole numbers. a + b = 1000 and a is 150 greater than b. Work out the values of a and b. • A rectangle has the area 24cm^2. This is expressed through the equation l ×w = 24cm^2. What could l and w stand for? Draw the rectangles to prove that the area is 24cm^2. • x and y are both whole positive numbers. When multiplied together they make an odd number under 20 What could x and y be?