



## Applying and Problem-solving

### Number

#### Sets and Operations

#### William's Pears

William's pear tree has lots of pears this autumn. He has collected some and wants to give them away to his friends, but he wants to be fair. He has figured out that his pears can be shared with 2, 3, 4, 5 or 6 people, with everyone getting the same share. Can you figure out a number or some numbers which might work for this problem?

Can you make your own problem?

Element	g The learner	h The learner	i The learner	j The learner
<b>Applying and Problem-solving</b>	Solves problems involving multiplication and division [using real-life contexts where appropriate]. Applies a range of strategies, including visual strategies, to solve problems involving more than one operation.	Solves and completes practical tasks and problems involving multiplication of whole numbers	Uses a variety of strategies to solve addition, subtraction, multiplication and division problems involving decimal and whole numbers	Uses estimation when solving problems involving operations with whole numbers, decimals and percentages, to help judge reasonableness of a solution.



Grading Rubric	What learners can typically do			
Applying and Problem-solving	g The learner	h The learner	i The learner	j The learner
	May explore multiples of the given numbers and checks each against all numbers of people.	As for learner g. May record their work using a list, table or images of groups. Begins to organise systematically.	As for learner h. Looks for patterns in attempted solutions and can articulate why some numbers (e.g. 30, and perhaps where 30 is multiplied by an odd number) cannot be correct solutions.	As for learner i, also analyses common multiples of 4, 5, and 6 to generate possible solutions. Recognises that 2 and 3 can be ignored as they are contained in all solutions for 4 and 6. Can articulate that all multiples of 60 are solutions and present an argument why.