

National Curriculum Statement

All students

Fluency

- Calculate the value of the letter in each equation.

$3a = 15$	$a =$
$5b = 10$	$b =$
$63 = 9c$	$c =$
$12d = 48$	$d =$

- Calculate the value of the letter in each equation.

$20 = 4a + 4$	$a =$
$3b + 5 = 11$	$b =$
$14 = 6c - 4$	$c =$
$2d - 5 = 5$	$d =$

- A function machine adds 7 to any number that is inputted.

What is the output when the input is:

- 15
- 12

What is the input when the output is:

- 25
- 42



Reasoning

- If **a** stands for a number, complete the table below:

a	4a	4a + 2
12		
	36	
		102

If the largest number in the table above was 894. What would the largest total of **a** be?

- Helen says,

"If there is a number before a letter, you multiply. Eg $5b$ if there is a number after a letter, you divide. Eg 6^{2a} "

Is Helen correct?

Explain your reasoning.

- Kat substitutes $b = 3$ into the formula $4b + 5$. She gets the answer 17. Is she correct? Explain your answer.

Problem Solving

- Find the totals of the missing rows and columns.

				54
				46
				48

- 7 pears and 1 banana cost 57p.
3 bananas, 1 pear and 2 apples cost 41p.
1 pear, 2 apples and 2 bananas cost 33p.
How much does 1 piece of each fruit cost?

Can you write each of the sentences above as a formula?