



**Year 6
Maths
Thursday 2nd July**



Lesson Aims

- I can find and use mathematical rules.

Success Criteria:

- I understand the term input
- I understand the term output
- I can calculate an output when the rule is known.
- I can find a rule when the input and output are given.



Learn

The examples in the videos are often easy enough to solve with just a few notes, but we will use **algebra** to find the solution so we can practise the method.

This problem, and all the problems in this lesson have more than one solution. Our thinking will be about finding lots of solutions, then deciding which solutions make sense in the context of the problem.

We will use algebra to support the problem-solving method, but you might be able to find your own methods for solving these problems too.

We will use **substitution** to work out possible answers and think about why some answers aren't possible in the context of the question.





Find the possible solutions for

$$x + y = 4$$

| | | | | |
|----------|----------|----------|----------|----------|
| X | 1 | 2 | 3 | 4 |
| Y | 3 | 2 | 1 | 0 |

Can you understand why these are the possible values for x and y ?



Find the possible solutions for
 $2a + b = 20$

| | | | | |
|----------|----------|----------|----------|----------|
| a | 1 | 2 | 3 | 4 |
| 2a | 2 | 4 | 6 | 8 |
| b | | | | |
| 2a+b | 20 | 20 | 20 | 20 |

What does the value b need to be in each of the questions?



Can you find possible solutions for:

$$x + 3y = 8$$

What could x be?

What could y be?



Can you find possible solutions for:

$$x + 3y = 8$$

What could x be?

What could y be?

x could be 2. y could be 2

x could be 5. y could be 1

Why can x not be 3?



There are videos to support the learning of this topic.

<https://vimeo.com/428002579>



Activity

Complete the activity sheets attached on the website. Choose your level of challenge from the documents provided.



Fluency Activity Answers

The answers will be included in the question documents.



Review

- Can you review your learning?

