

Knowledge Organiser: Mathematics Year 11 Foundation Autumn Term 2

Big idea: Algebra

Key Vocabulary

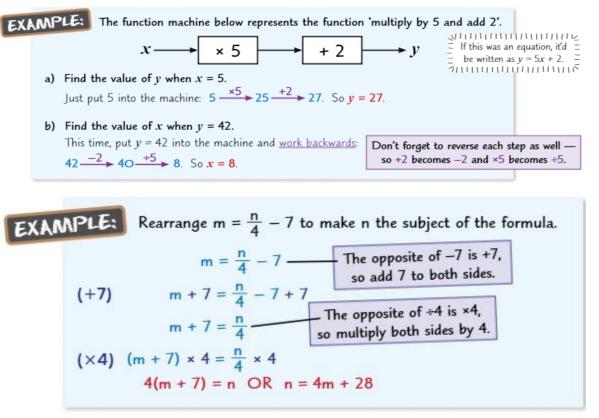
Key skills:

- **Expanding and Factorising**
- Changing the Subject
- Functions

Input, Output, Expression, Coefficient, Evaluate, Functions, Inverse Substitute, Rearrange, Solving,

Functions Produce Outputs from Inputs (2)

- 1) A function takes an input, processes it (e.g. multiplies it by 5 and adds 2) and outputs a value.
- 2) If you have to use a function machine, just put in the number, follow the steps and see what comes ou
- 3) If you're given the output and have to find the input, use the function machine in reverse.





Changing the Subject of a Formula (5)

<u>Rearranging formulas</u> means making a different letter the <u>subject</u>, e.g. getting 'y = 1' from 'x = 3y + 2'. Fortunately, you can use the same methods that you used for solving equations (see p29-30) - here's a quick reminder:

- Always do the SAME thing to both sides of the formula.
- Rul 2) To get rid of something, do the opposite.
 - The opposite of + is and the opposite of is +.
 - The opposite of \times is \div and the opposite of \div is \times .
- Golden 3) Keep going until you have the letter you want on its own.

