## Maths - Finding a Rule - one step.

Q1. Here is a function machine.


- What is the output if the input is 2 ?
- What is the output if he input is 7.2 ?
- What number went in if the output was 22 ?
- What is the output if the input is $a$ ? What about if you put $x$ in?

Q2.
Complete the table for the given function machine.


| Input | 5 | 5.8 | 10 | -3 | -8 |  |  |  | $a$ | $y$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Output |  |  |  |  |  | 9 | 169 | 0 |  |  |

Q3.
Work out the functions
(a)


Reasoning and Problem Solving
Q1.
Meg has a one-step function machine.
She puts in the number 6 and the number 18 comes out


Q2.
Giles puts in some numbers into a function machine.


What is he output from the function when the input is $16 ?$

Can you make up some questions of your own? Create a function machine (input, output) or questions that use a one-step rule. Try and be inventive / tricky? Can the people at home solve your problems?

