

Tuesday (medium) – LO: to find and calculate with a two-step rule.

Varied fluency

Reasoning and problem solving

5a. Write the outputs for the algebraic function.

$(a + 4) \div 2$

4	\longrightarrow	
12	\longrightarrow	
8	\longrightarrow	

6a. True or false?

3 \longrightarrow $4a + 3$ \longrightarrow 15

7a. Use the function to match up the inputs and outputs.

$3x + 5$

4		32
9		41
12		17

8a. What is the algebraic rule for this function machine?

3	\longrightarrow	$+4$	\longrightarrow	$?$	\longrightarrow	14
5	\longrightarrow	$+4$	\longrightarrow	$?$	\longrightarrow	18
10	\longrightarrow	$+4$	\longrightarrow	$?$	\longrightarrow	28


4a. Millie put some numbers into a function machine.

Input	Function	Output
5	\longrightarrow ? \longrightarrow ? \longrightarrow	8
8		20
9		24

What is the output when the input is 12?

5a. True or false? Explain your answer.

Input	Output
6	5
8	6

 I think that the function is $\div 3$ and then add 3 because $6 \div 3$ then $+ 3$ is 5.

6a. Eesa is using this function machine.

Function

Input \longrightarrow $-4 \div 2$ \longrightarrow Output

He puts a number into the function machine. He then puts the output back into the machine. He now has the output of 1.

What was Eesa's original number?