

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

Varied fluency

1a. Write the outputs for the algebraic function.

$2a - 6$

| | | |
|----|---|--|
| 10 | → | |
| 5 | → | |
| 4 | → | |

2a. True or false?

| | | | | |
|----|---|----------|---|----|
| 12 | → | $2a - 2$ | → | 21 |
|----|---|----------|---|----|

3a. Use the function to match up the inputs and outputs.

$x \times 2 + 10$

| | | |
|----|--|----|
| 1 | | 32 |
| 11 | | 12 |
| 7 | | 24 |

4a. What is the algebraic rule for this function machine?

| | | |
|----|---|----|
| 12 | | 27 |
| 9 | → | 21 |
| 10 | → | 23 |

Reasoning and problem solving


1a. Ned put some numbers into a function machine.

| | | |
|-------|----------|--------|
| Input | Function | Output |
| 5 | → | 8 |
| 1 | → | 0 |
| 2 | → | 2 |

What is the output when the input is 4?

2a. True or false? Explain your answer.

| Input | Output |
|-------|--------|
| 2 | 9 |
| 5 | 15 |

 I think that the function is $+ 16$ and then $\div 2$ because $2 + 16$ then $\div 2$ is 9.

3a. Fatima is using this function machine.

Function

| | | |
|-------|----------------|--------|
| Input | → | Output |
| | $+ 2 \times 2$ | |

She puts a number into the function machine. She then puts the output back into the machine. She now has the output of 16.

What was Fatima's original number?