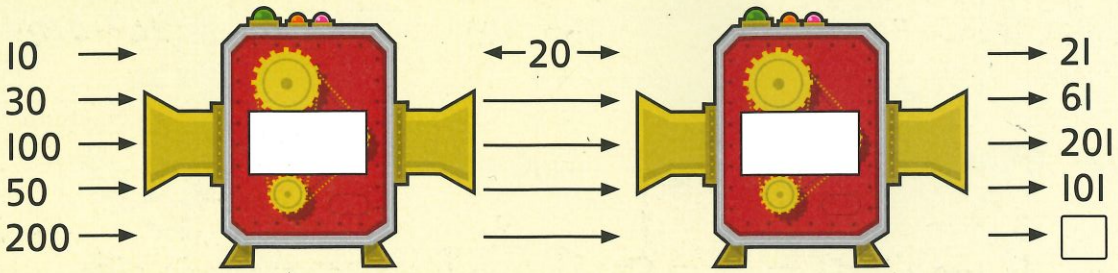
Describing functions

Write what each pair of machines is doing. Then write the missing output. Write four more inputs and outputs for each.

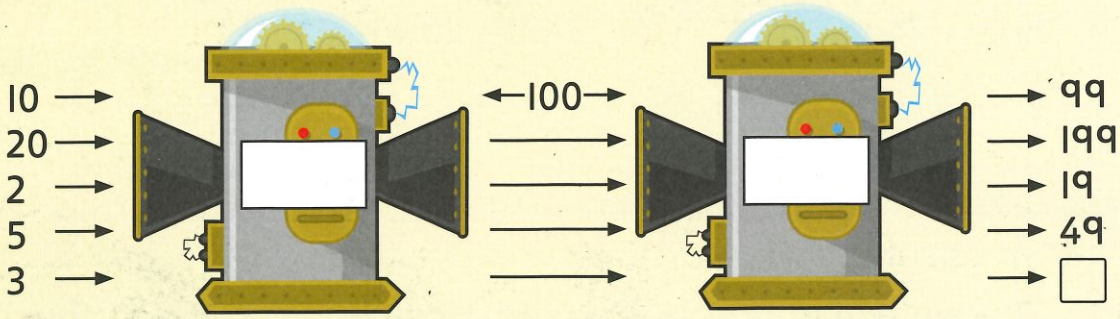
1



Multiplies by □, then adds □.

200 → □.

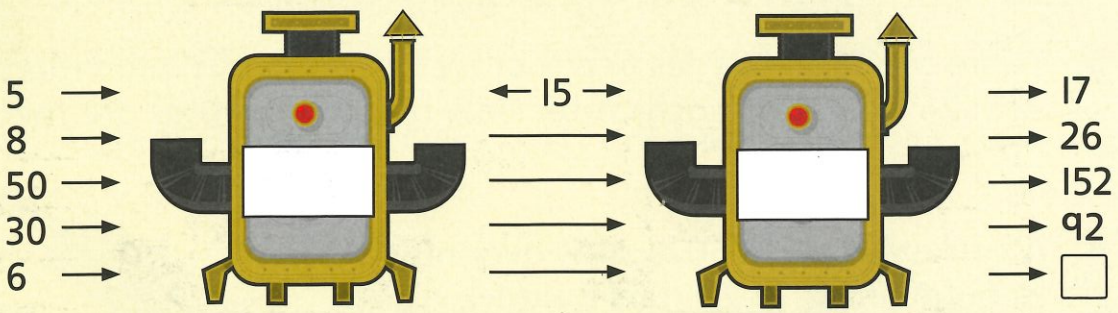
2



Multiplies by □, then takes □.

3 → □.

3



Multiplies by □, then adds □.

6 → □.

THINK

Write your own pair of function machines with three inputs and outputs.

I am confident with working out the relationship between numbers in a function machine.

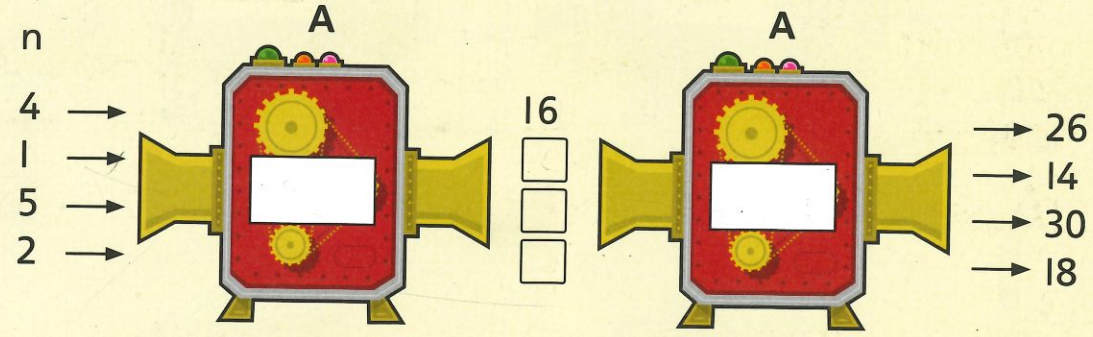
Match each algebraic expression to one of the function machines below. Then write the missing steps for each function machine.

1. $10 \times n - 5$ $(10n - 5)$

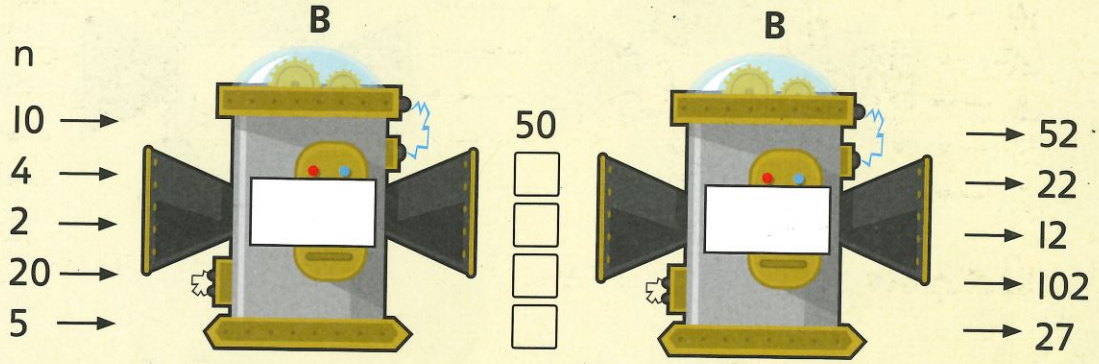
2. $5 \times n + 2$ $(5n + 2)$

3. $4 \times n + 10$ $(4n + 10)$

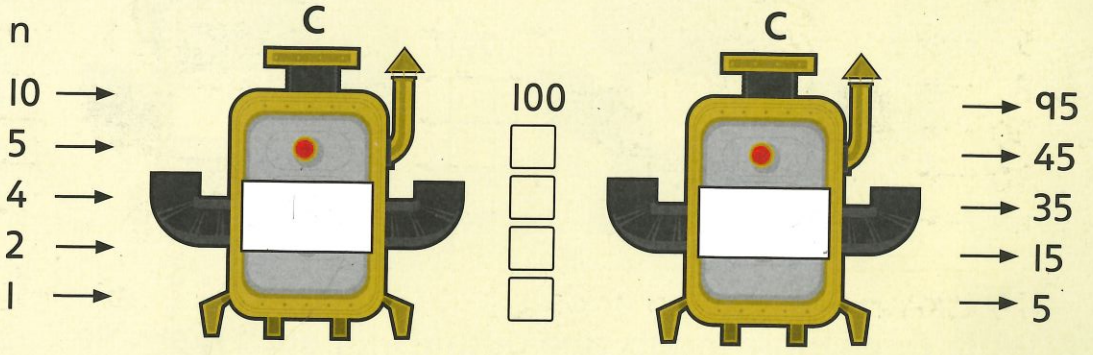
4.



5.



6.



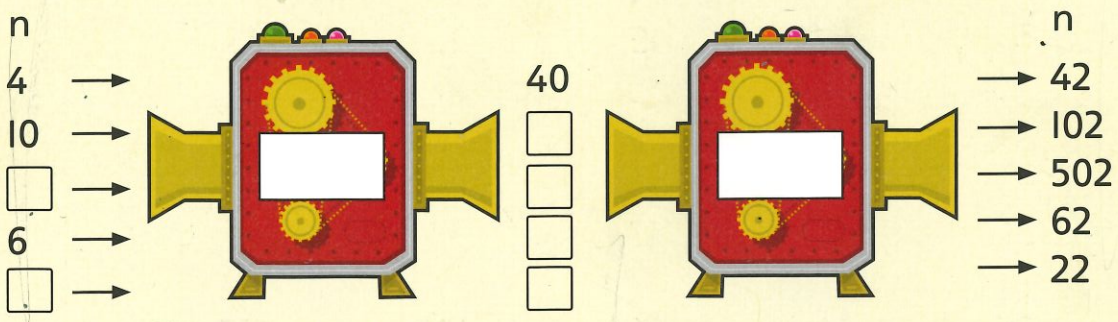
THINK

If each pair of function machines were put in reverse order so that they added or subtracted first, then multiplied, would the outputs be the same?

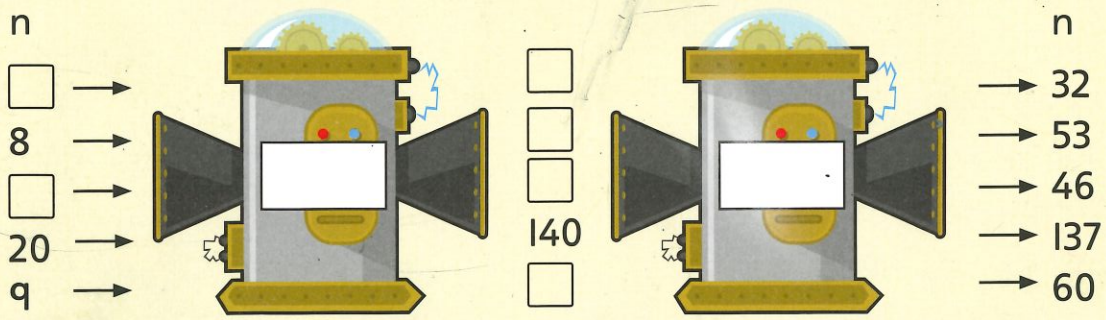
I am confident with working out the relationship between numbers in a function machine.

Describe what each pair of function machines is doing, first in words and then using *n*. Then fill in the missing steps.

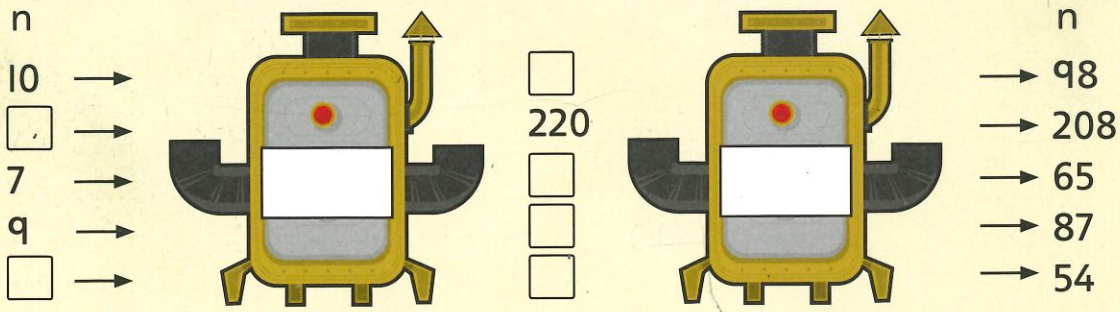
1



2



3



4 Write three more inputs and outputs for each machine.

Draw your own pair of function machines with three inputs and outputs and describe what they do using *n*.

I am confident with working out the relationship between numbers in a function machine.