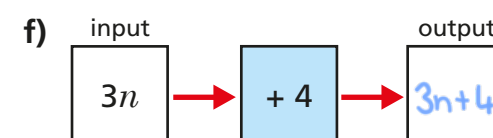
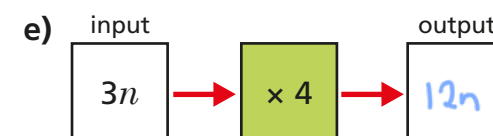
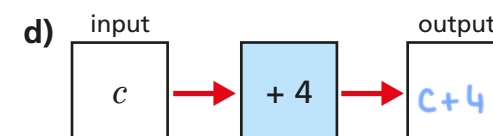
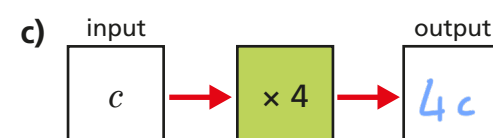
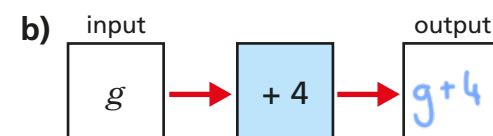
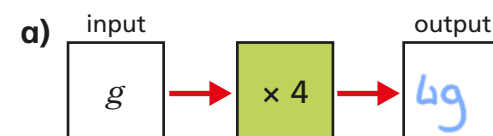


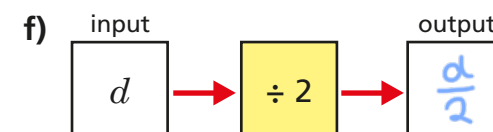
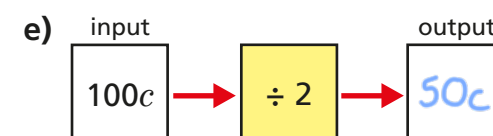
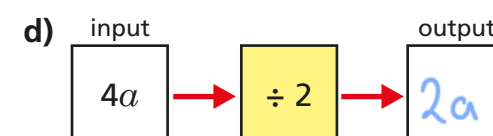
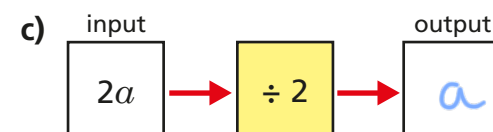
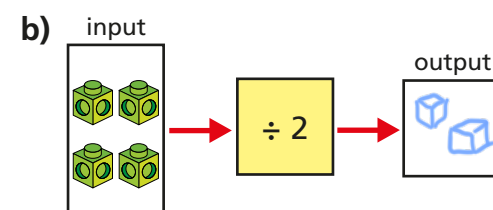
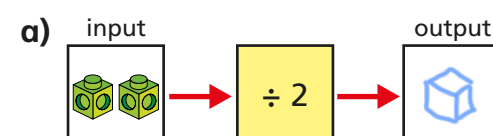
Single function machines (algebra)



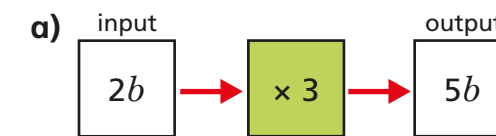
1 Complete the function machines.



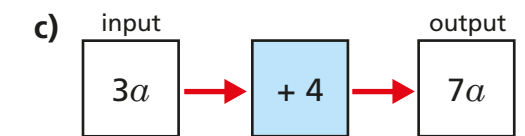
2 Complete the function machines.



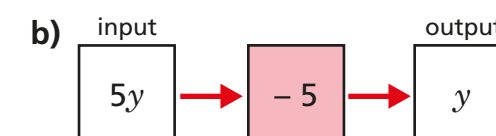
3 The outputs for these function machines are incorrect.
Explain the mistakes and find the correct outputs.



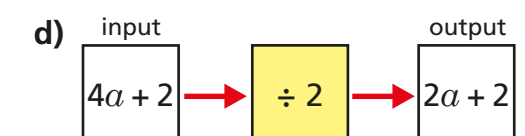
Done $2+3$ not 2×3
Should be $6b$



$3a$ and 4 are not
like terms. Should be $3a+4$

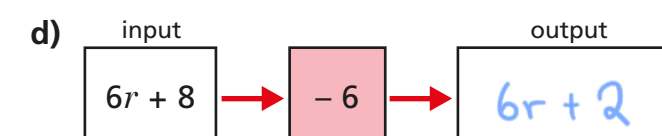
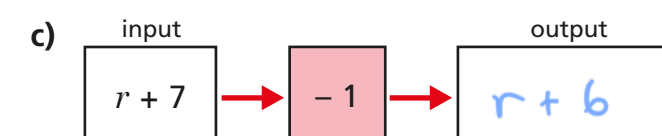
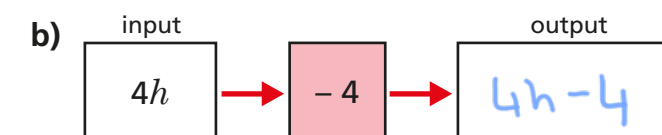
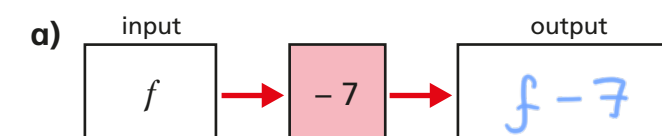


Taken 5 off $5y$
Should be $5y-5$



Not divided the 2
Should be $2a+1$

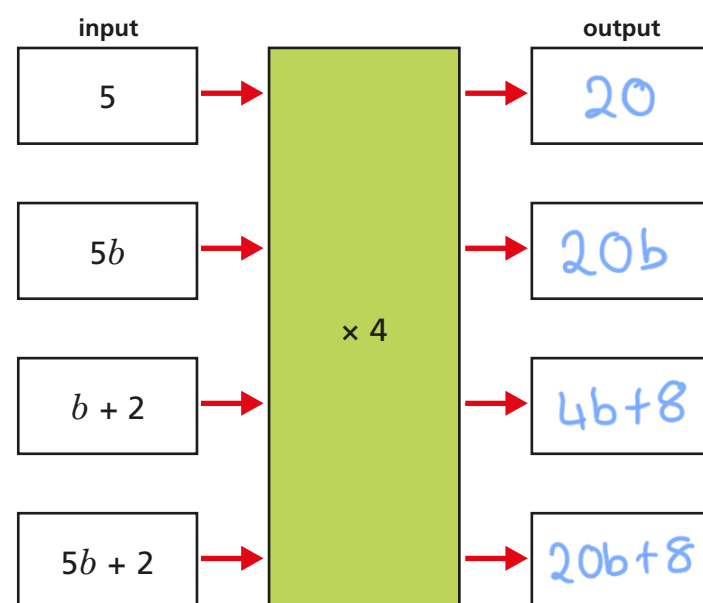
4 Complete the function machines.



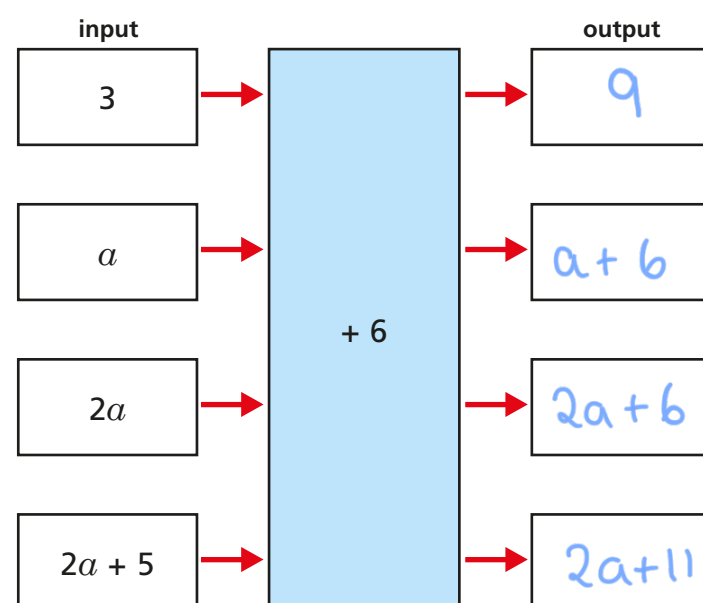
5

Complete the function machines.

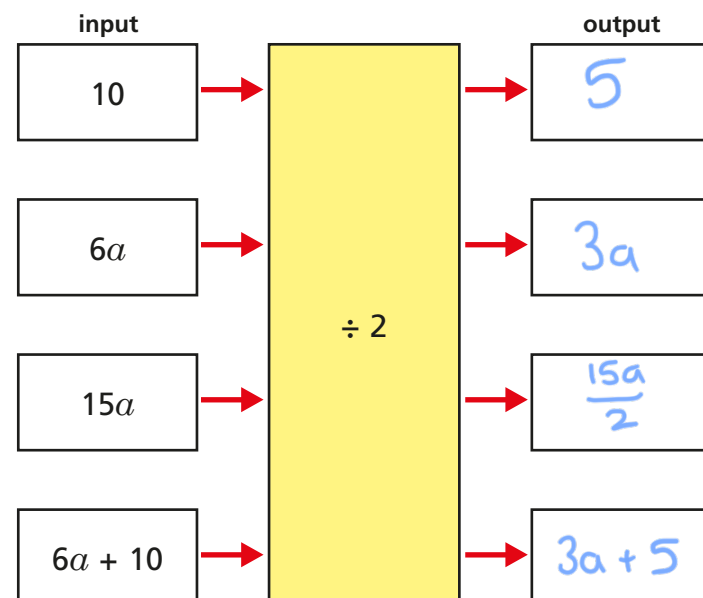
a)



b)



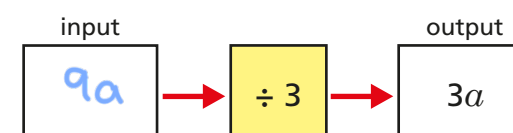
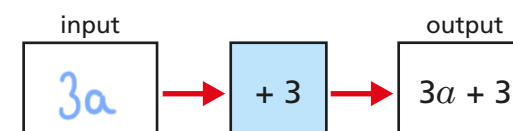
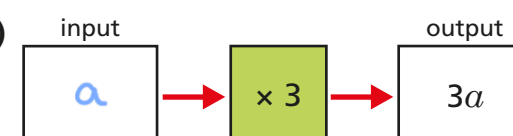
c)



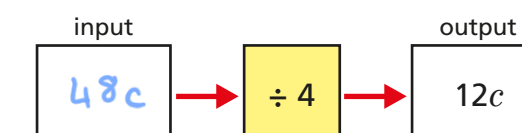
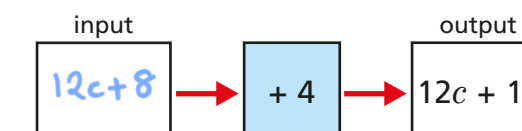
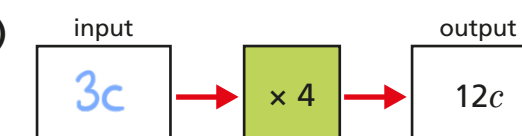
6

Complete the function machines.

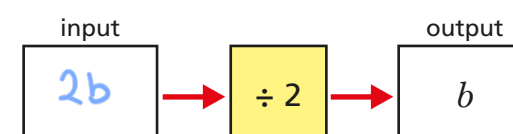
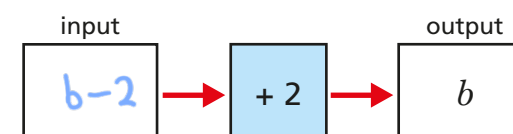
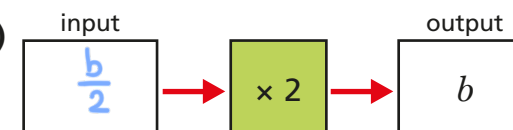
a)



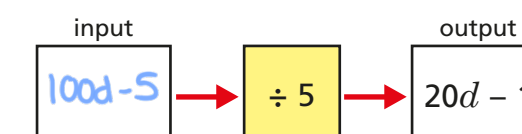
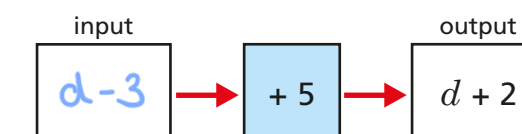
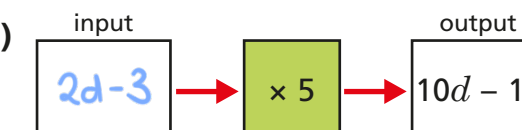
c)



b)



d)



7

How many different function machines will give an output of $8g + 4$?

Draw the function machines.

Various answers e.g.

$$2g + 1 \rightarrow \times 4 \rightarrow 8g + 4$$