

Find functions from expressions (single)

1 Complete the function machines.

a) input h → → output $h + 5$

d) input $2a$ → → output $2a + 7$

b) input y → → output $y - 2$

e) input $5n$ → → output $5n - 5$

c) input g → → output $4g$

f) input m → → output $\frac{m}{3}$

2 Complete the function machines.

input y → → output $3y$

input y → → output $y + 3$

What is the same and what is different about these function machines?
Explain your answer.



3 Tick the correct function machine in each pair.

a) input $2b$ → → output $10b$

input $2b$ → → output $10b$

b) input $2b$ → → output $10b$

input $2b$ → → output $10b$

What mistakes have been made in the incorrect function machines?
Talk about it with a partner.



4 Complete the function machines.

a) input h → → output $h + g$

e) input $2m$ → → output $2mr$

b) input k → → output kf

f) input $3a$ → → output $6ab$

c) input y → → output y^2

g) input r^2 → → output r

d) input $5p$ → → output p

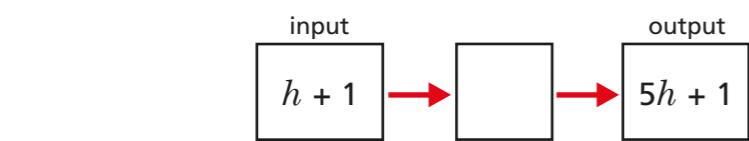
h) input $b - 2$ → → output $b - 7$

Do any of the machines have more than one possible answer?
Talk about it with a partner.



5

Mo and Ron are finding the function for this function machine.



Mo

The function is $\times 5$

The function is $+ 4h$.



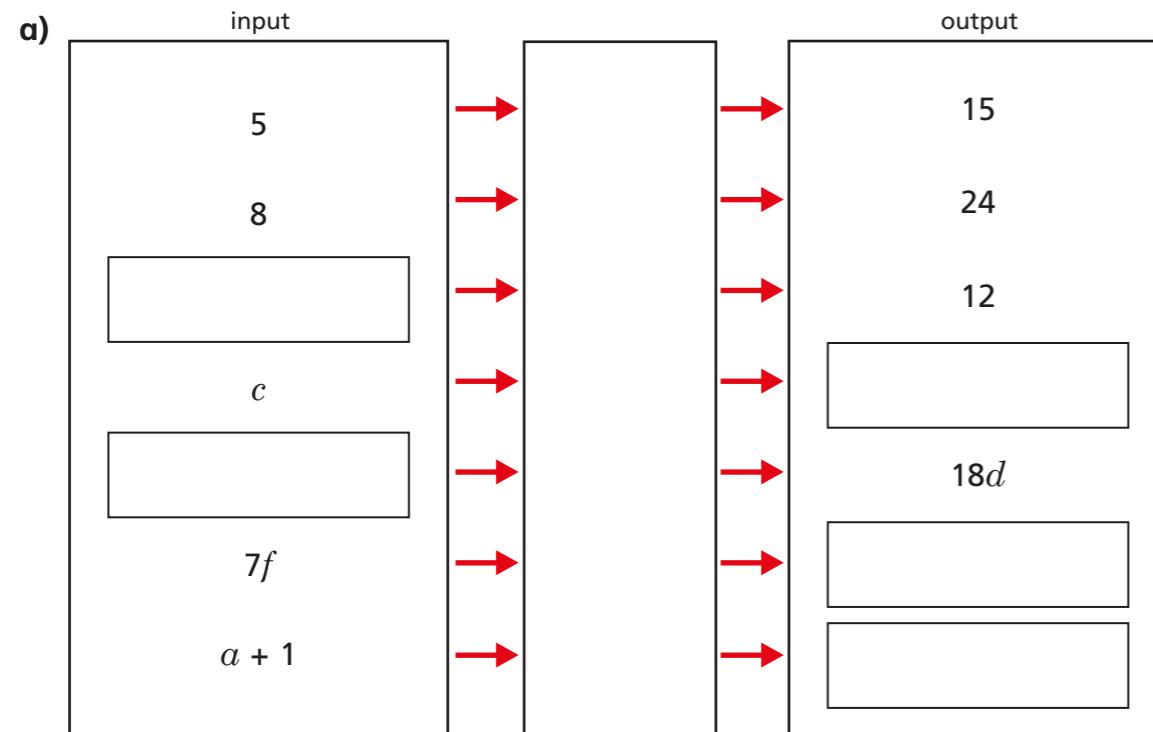
Ron

Who do you agree with? _____

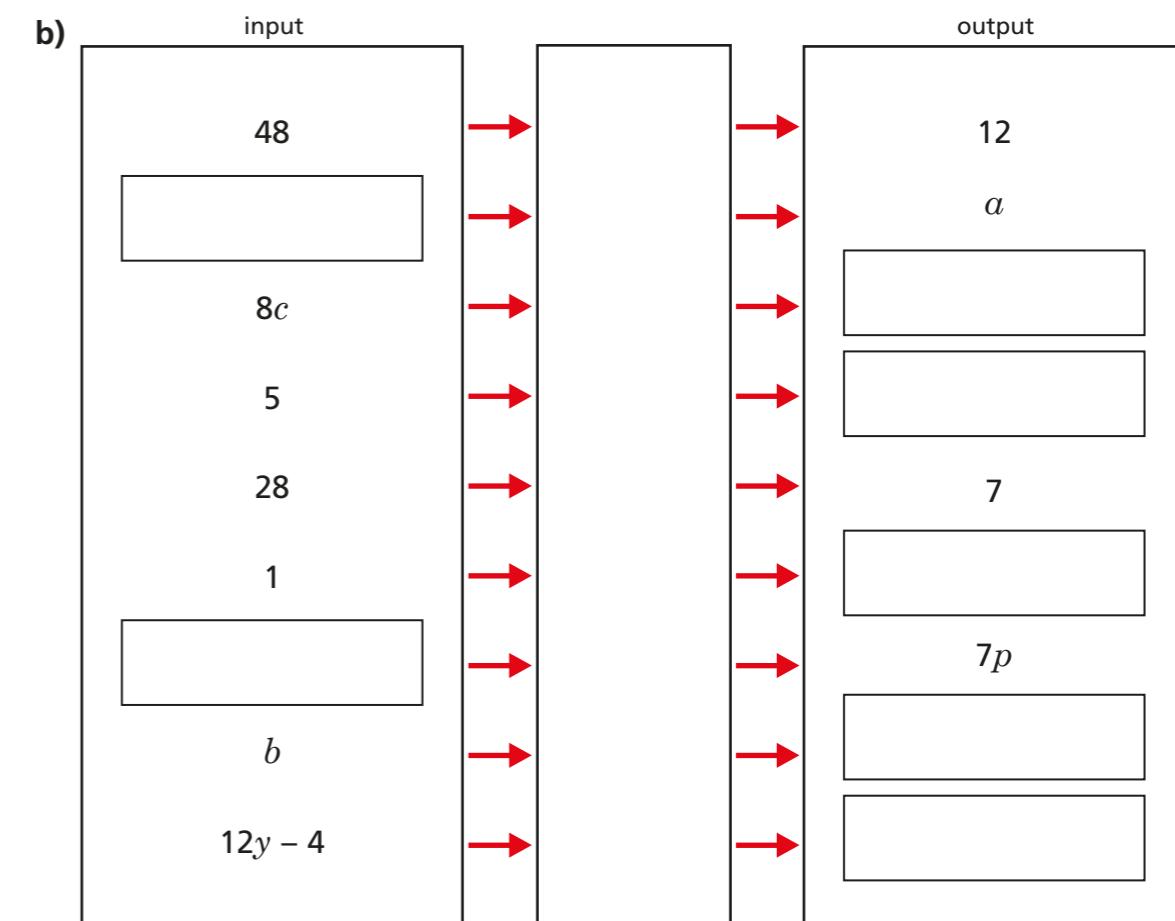
Explain your answer.

6

Complete the function machines.

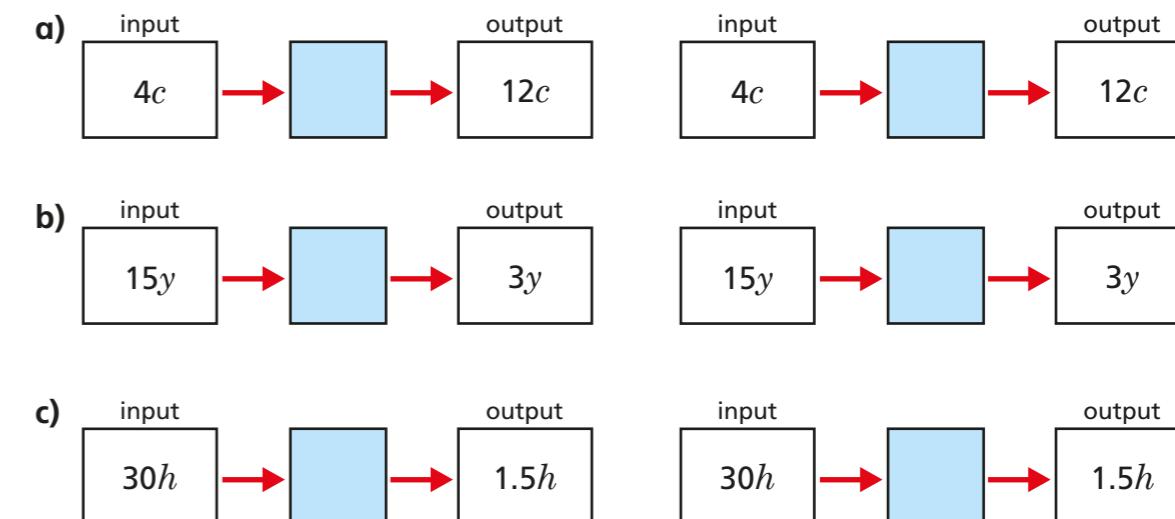


b)



7

Complete each function machine in two different ways.



Can you find any other ways to complete the function machines?

