Flashback

A. 867 + 300 =

B. 1,616 ÷ 8 =

C. $\frac{1}{8}$ of 32 =

D. 67 x 8 =

E. 6.54 x 10 =

Flashback

A. 867 + 300 = 1,167 *(M)*

B. 1,616 ÷ 8 = 202 *(W)*

C. $\frac{1}{8}$ of 32 = 4 *(M)*

D. 67 x 8 = 536 *(W)*

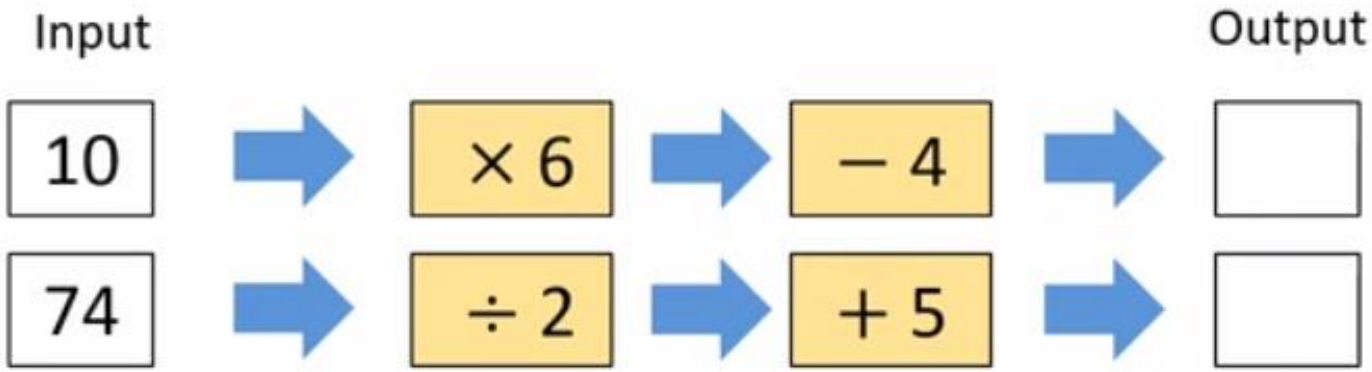
E. 6.54 x 10 = 65.4 *(M)*

Wednesday 24th February 2021

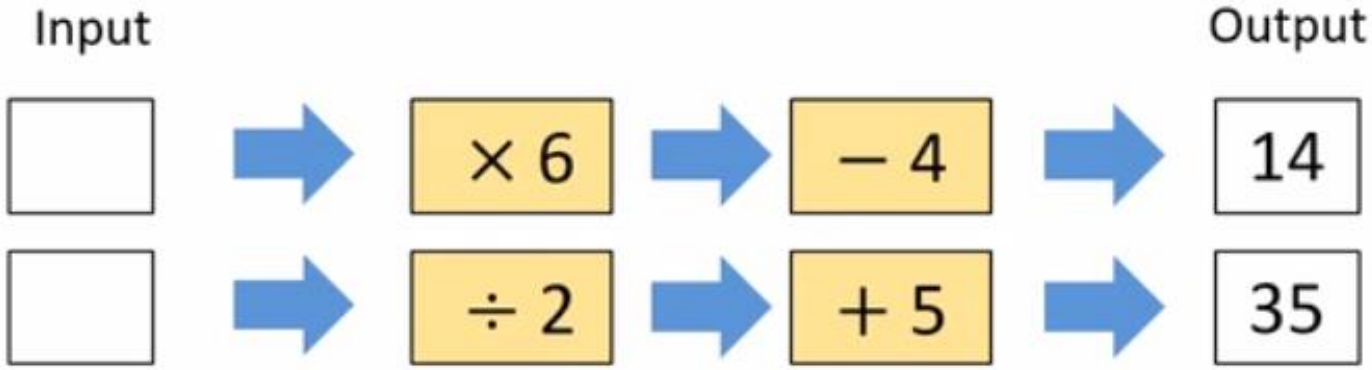
LO: Forming expressions

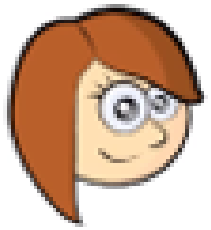
Get ready questions

1) Calculate the missing outputs for the function machine.



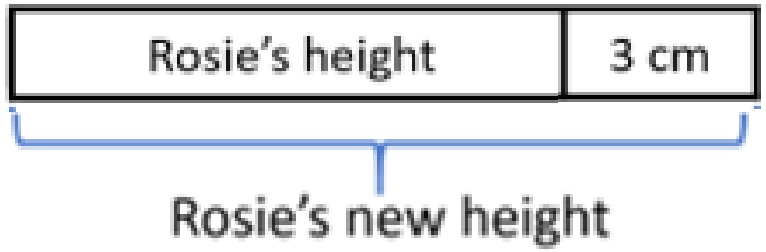
2) Calculate the missing inputs for the function machine.

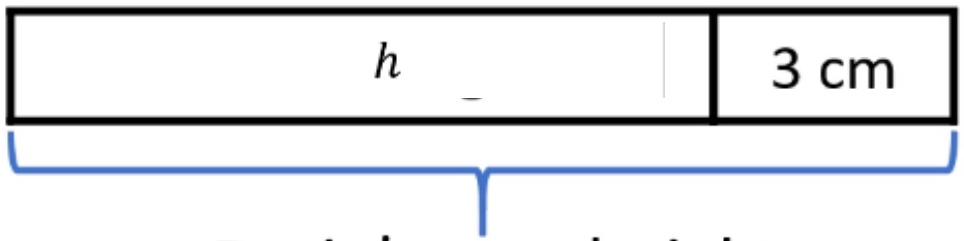




Rosie grows 3 cm

How could we represent what has just happened?

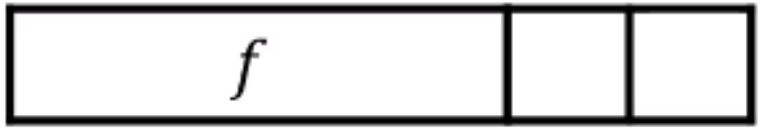




$$h + 3$$

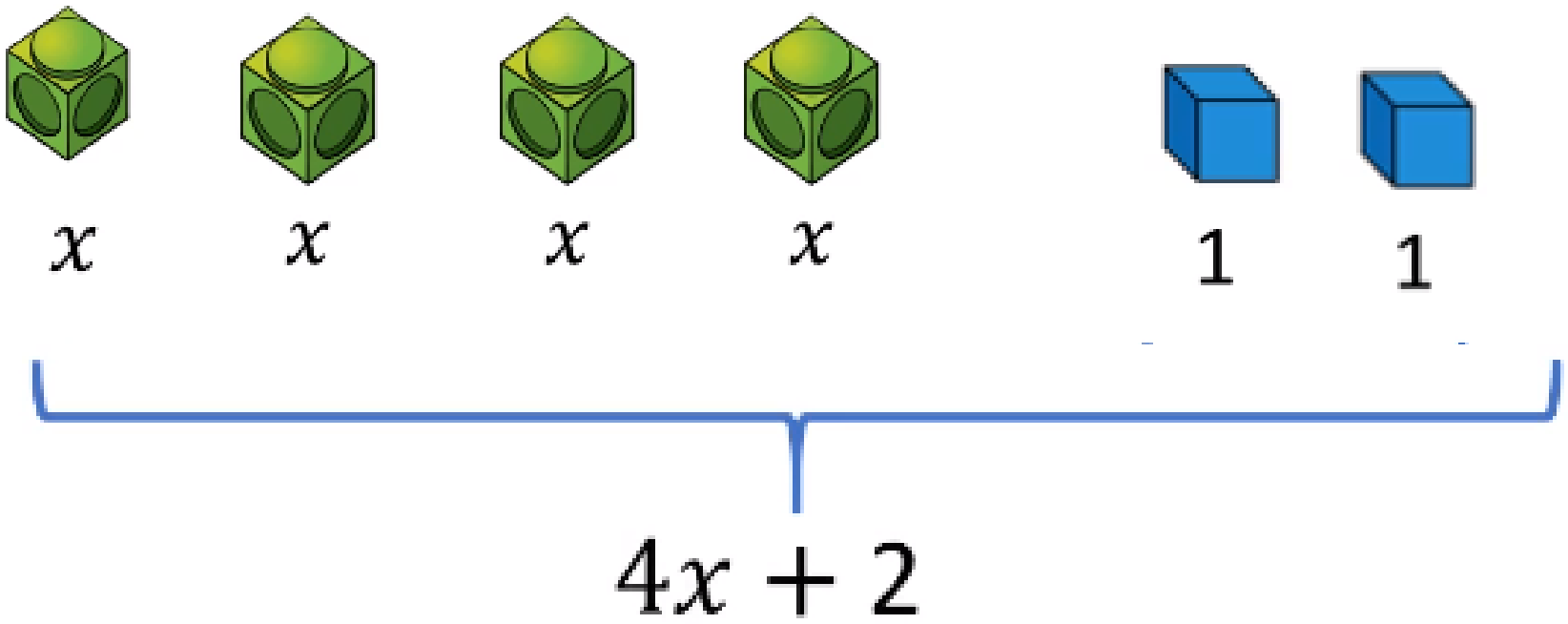
Billy has some frogs (f)
He catches 2 more.

$f + 2$

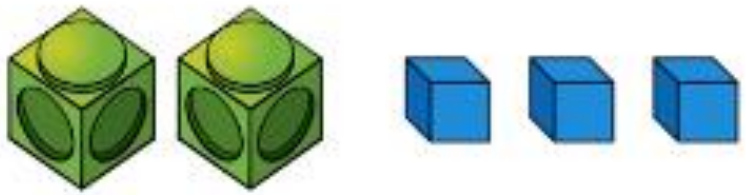


Sally has some sweets (s)
She buys 5 more.

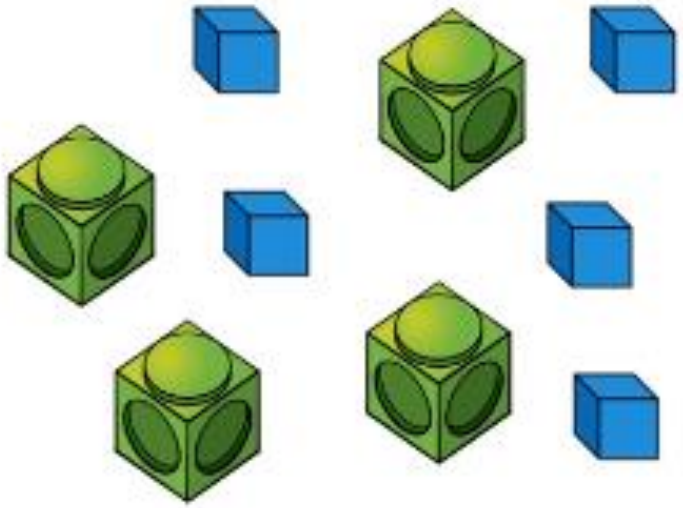
$s + 5$


x
x
x
x
1
1
4x + 2

How could you write these as expressions?



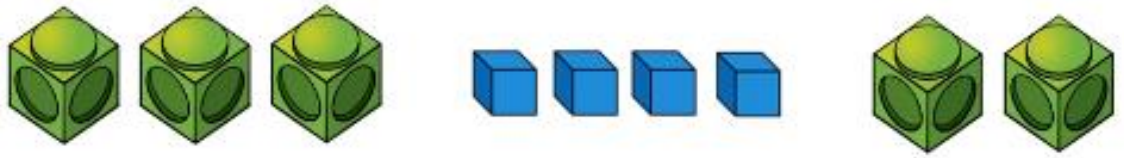
$2x + 3$



$4x + 5$

Simplify the expression

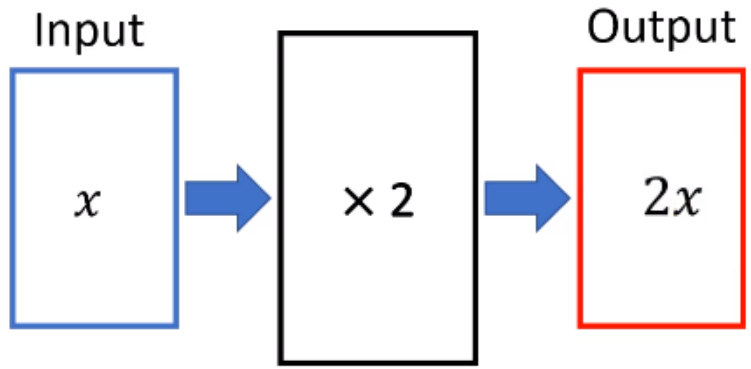
$$3y + 4 + 2y$$



$$5y + 4$$

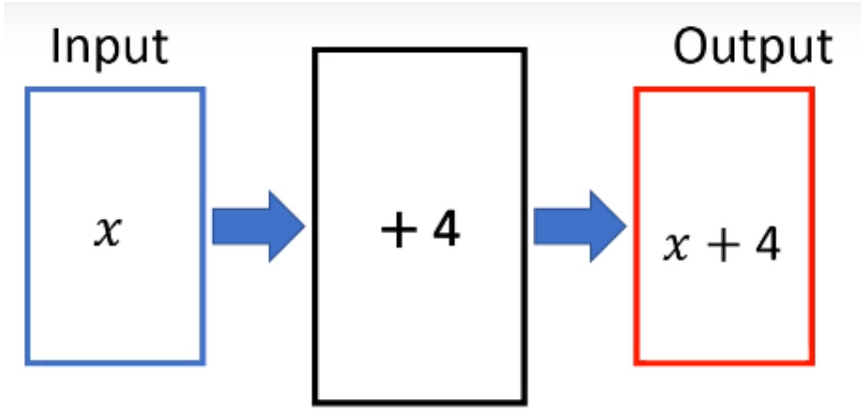
$$6p + 1 - 3p$$

$$2a + 7 + a - 1$$



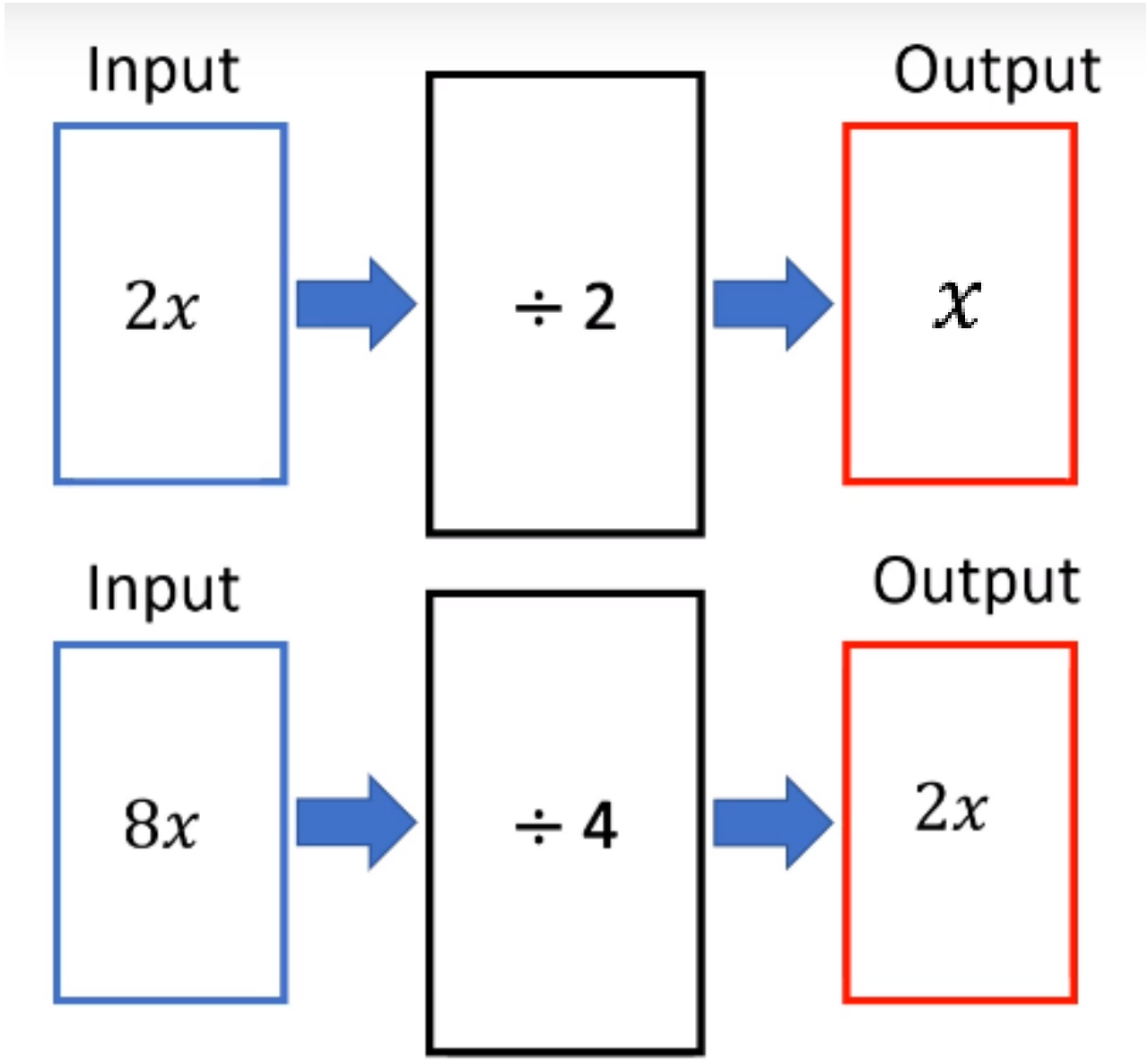
x multiplied by $2 = 2x$

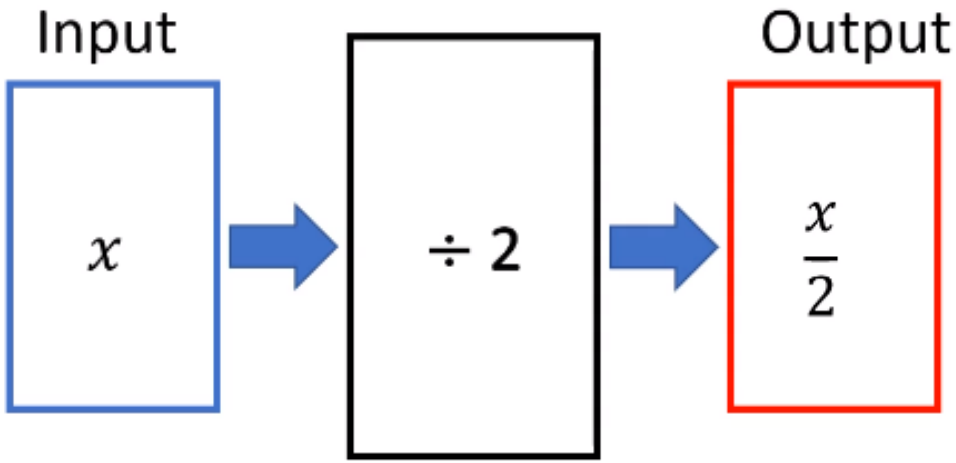
Double $x = 2x$



x add $4 = x + 4$

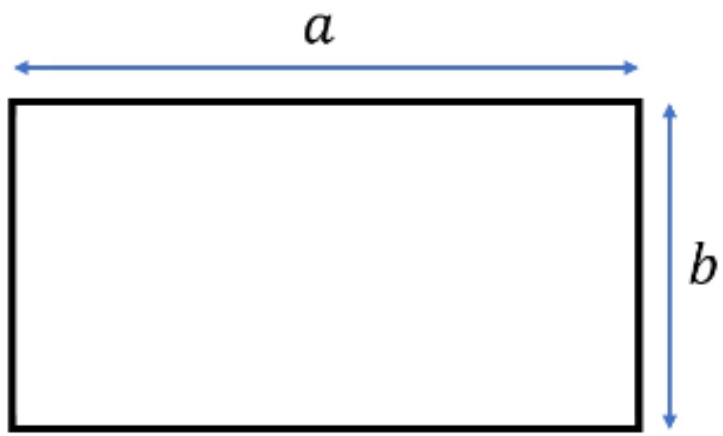
4 more than x is $x + 4$


Input
$2x$
$\div 2$
Output
x
Input
$8x$
$\div 4$
Output
$2x$



x divided by $2 = \frac{x}{2}$

Write an algebraic expression to represent the perimeter of the rectangle.

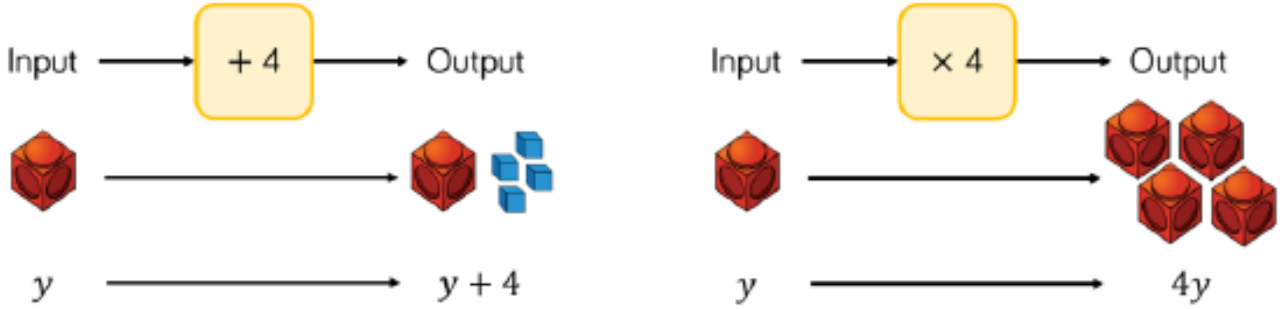


I think the expression is $a + b + a + b$

$$2a + 2b$$

A

1. Mo uses cubes to write expressions for function machines.

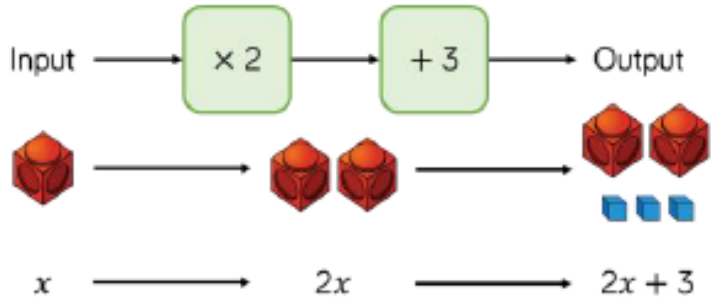


Use Mo's method to represent the function machines.
What is the output for each machine when the input is a?

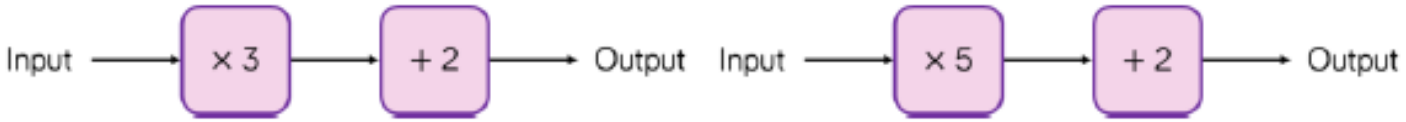
2. How can you write $x \times 3 + 6$ differently?

B

1. Eva is writing expressions for two-step function machines.



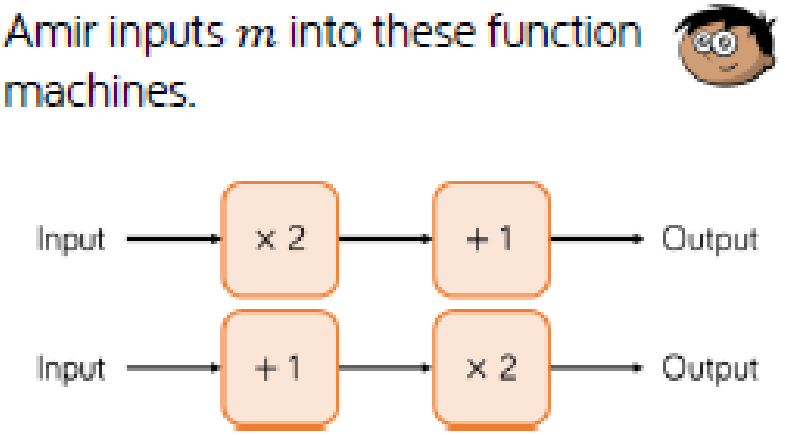
Use Eva's method to write expressions for the function machines.



2. Are $2a + 6$ and $6 + 2a$ the same? Explain your answer

C

1. Amir inputs m into these function machines.

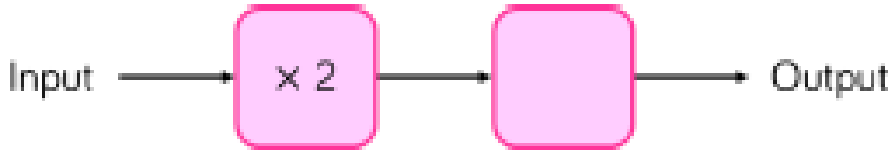


He says the outputs of the machines will be the same.

Do you agree?

Explain your answer.

2. This function machine gives the same output for every input.
For example if the input is 5 then the output is 5 and so on.



What is the missing part of the function?

What other pairs of functions can you think that will do the same?