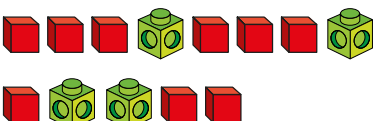


- 1** Tommy uses linking cubes to represent an unknown number and base 10 ones to represent 1.  = x  = 1
- Write algebraic expressions to describe the sets of cubes.
- The first one has been done for you.

a)  $2x + 3$	e) 
b) 	f) 
c) 	g) 
d) 	h) 

- 2** Use linking cubes and base 10 ones to represent the expressions.
- a) $x + 2$ b) $2x$ c) $3x + 1$ d) $x + 6$
- Compare answers with a partner.

- 3** Use cubes to help you simplify the expressions.
- The first one has been done for you.

a) $2y + 5 + y$

 $3y + 5$

b) $3a + 2 + a + a$



c) $6p + 2 - 2p$



d) $m + 4 + 3m - 3$

- 4** Complete the function machines.

a)	input		output
	2	→	6
	7	→	11
	y	→	

c)	input		output
	6	→	3
	12	→	9
	y	→	

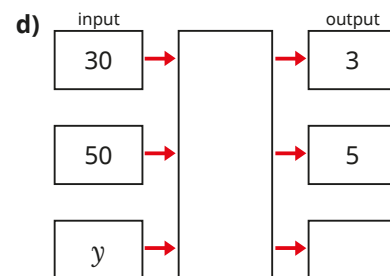
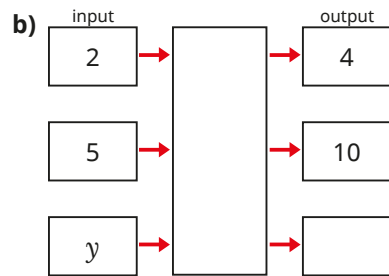
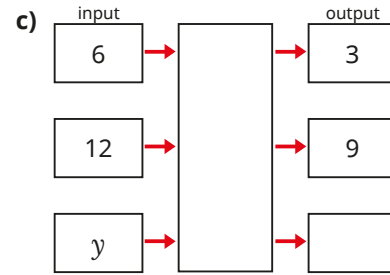
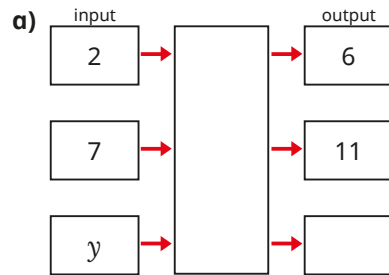
b)	input		output
	2	→	4
	5	→	10
	y	→	

d)	input		output
	30	→	3
	50	→	5
	y	→	

- 5** Match each statement to the equivalent algebraic expression.
- Write the missing statements.

5 more than y	$2y$
y less than 5	$y - 5$
y multiplied by 5	$5 - y$
y divided by 5	$y + 5$
double y	$5y$
	y^2
	$\frac{y}{5}$

4 Complete the function machines.

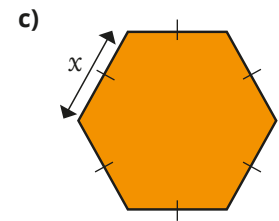
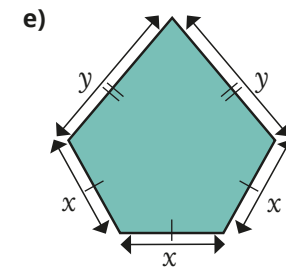
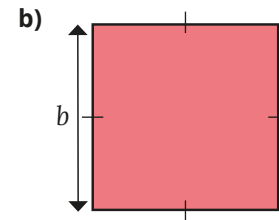
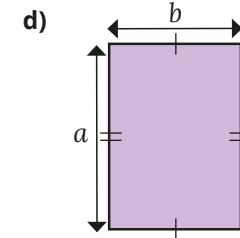
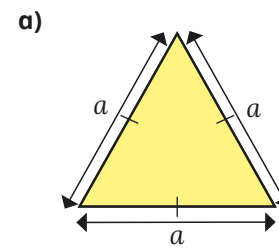


5 Match each statement to the equivalent algebraic expression.
Write the missing statements.

- 5 more than y
- y less than 5
- y multiplied by 5
- y divided by 5
- double y
-
-

- $2y$
- $y - 5$
- $5 - y$
- $y + 5$
- $5y$
- y^2
- $\frac{y}{5}$

6 Write an algebraic expression to represent the perimeter of each shape.



7 Complete the bar models.

