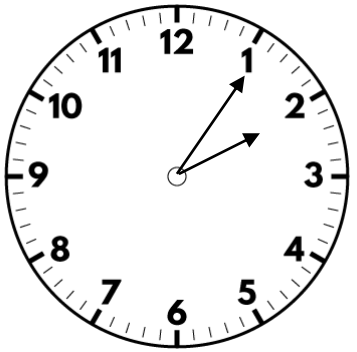
Flashback 4

Year 6 | Week 6 | Day 4

1) Solve the equation $5x + 3 = 38$ $x = 7$



2) What might the rule be for this function machine?

- 40 or ÷ 5

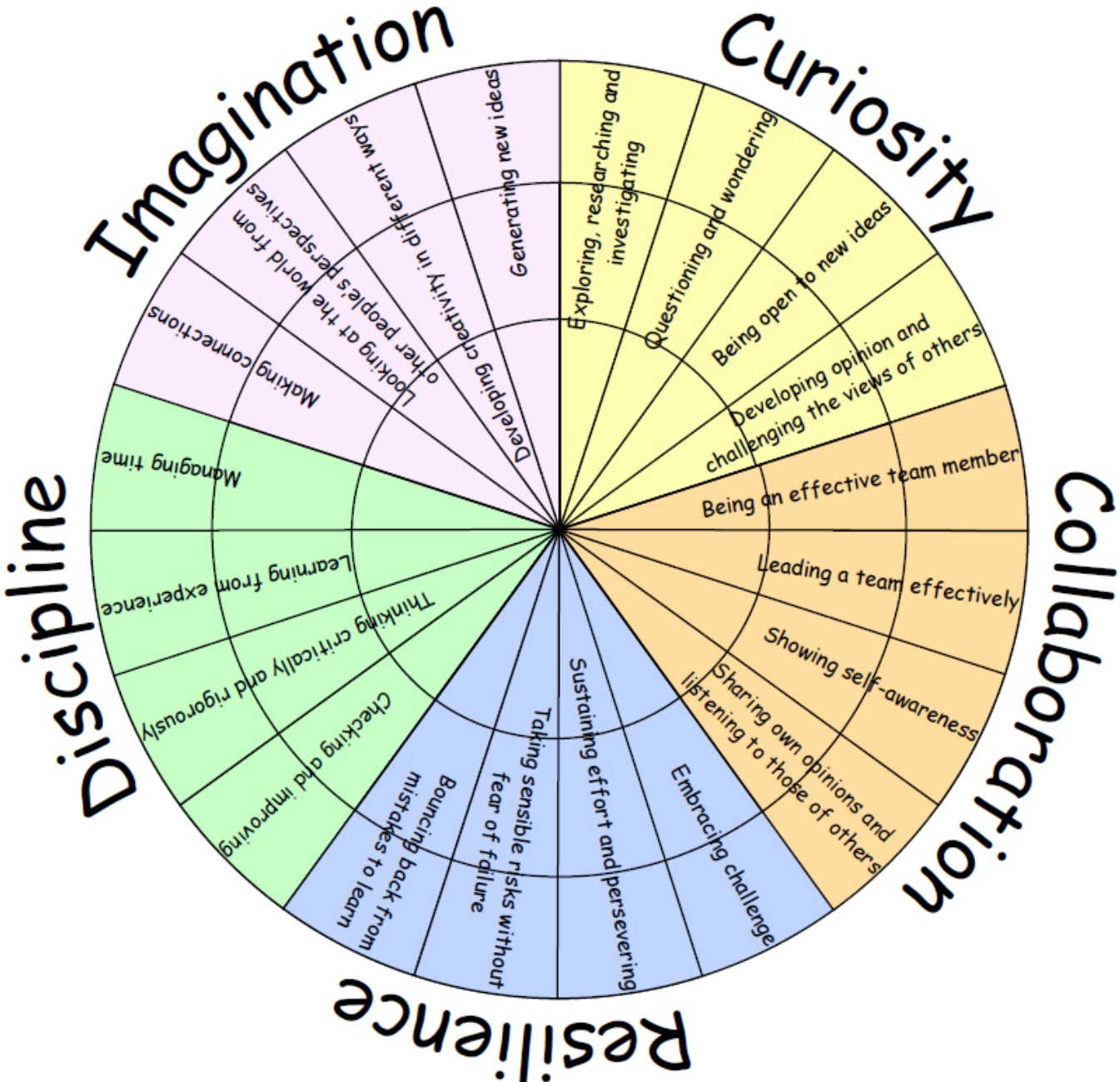
3) Work out 19.64 ÷ 4 4.91

4) What number is 6 less than 2? - 4

I CAN USE ALGEBRA TO HELP ME SOLVE PROBLEMS

PROPERTIES OF NUMBER (21IV)

LEARNING HABITS?



GUIDED PRACTICE

Write an expression to find the perimeter of a regular pentagon and a regular hexagon.

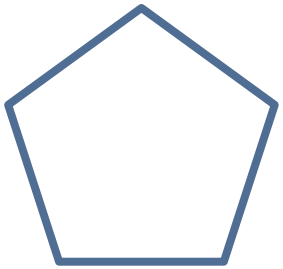
Substitute 6cm for the side length of each shape.

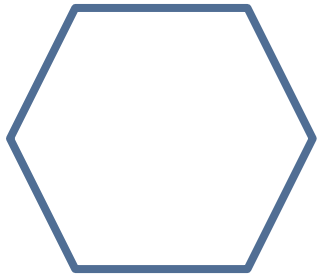
Now try 12cm. What do you notice?

Can you write this algebraically?

Pentagon = 5 sides

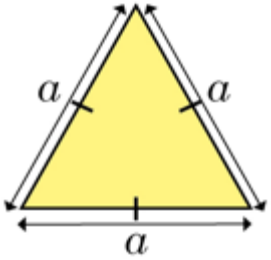
Hexagon = 6 sides

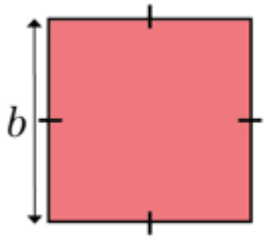




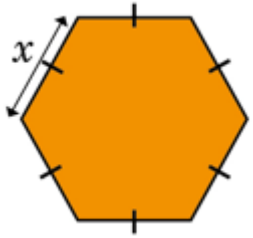
INTELLIGENT PRACTICE

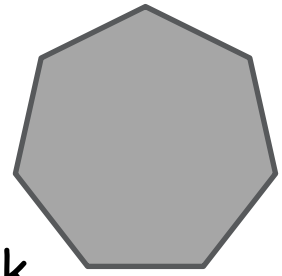
Write an expressions to find the **perimeter** of each of these regular shapes:





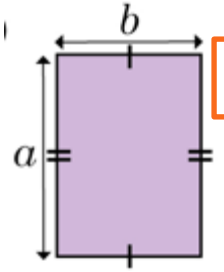
Write an expressions to find the **perimeter** of each of these regular shapes:

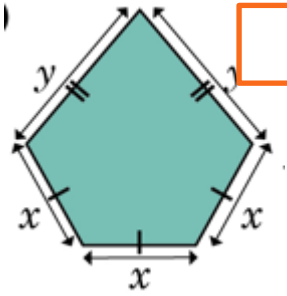




k

Write an expression to find the **perimeter** of the following shapes:





Can you write the **area** of a square algebraically?

Can you write the **area** of a rectangle algebraically?

3 B4 Me: Think carefully about the labels you could add to each side.

DIVE DEEPER 1

1) Tommy uses multi-link cubes to represent an unknown number and base ten ones to represent 1.

Write expressions to represent the following sets of cubes:

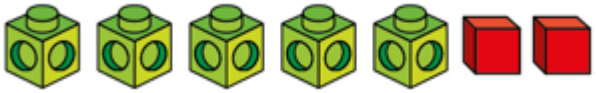
a) 

2x + 3 (this is an example)

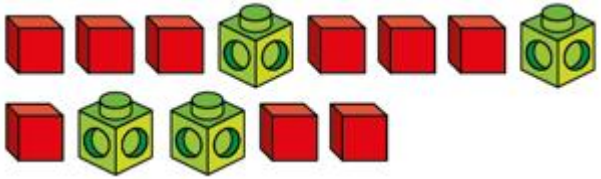
b) 

c) 

d) 

e) 

f) 

g) 

DIVE DEEPER 2

2) Simplify the following expressions:
Here is an example:
$2y + 5 + y = 3y + 5$

a) $3a + a =$

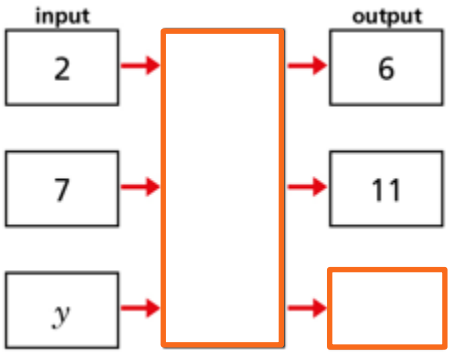
b) $6p - 2p =$

c) $m + 4 - 3 =$

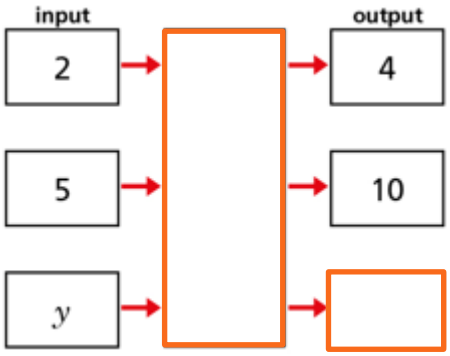
d) $7t - 4 + 5 =$

3) Complete the function machines:

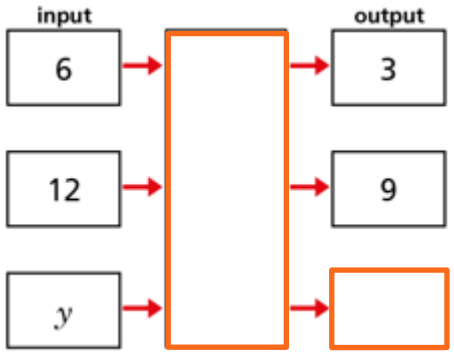
a)



b)



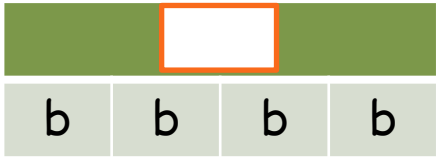
c)



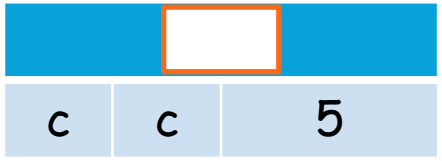
4) Complete the bar models:

a)

b)



c)

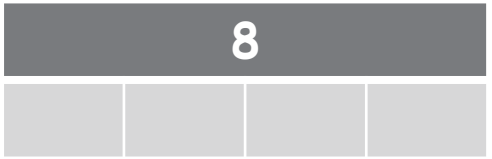


DIVE DEEPER 3

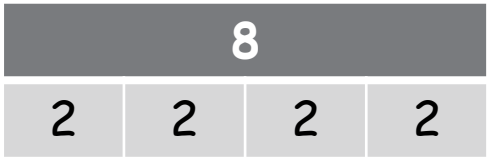
5) Match each statement to the equivalent expression. Fill in the missing two boxes at the end.

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
	$\frac{y}{5}$

For Question 6, this may help you:

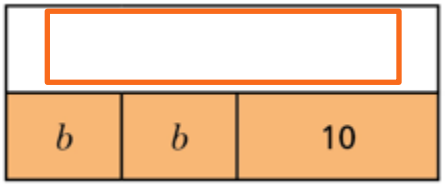


If 8 is in the top bar, then the bars underneath must be 8 ÷ 4. ∴they equal 2.

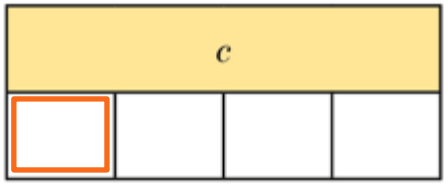


6) Complete the bar models:

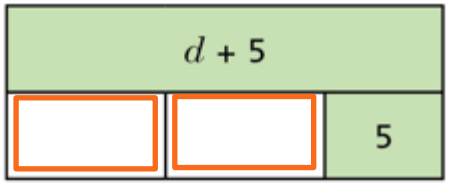
a)



b)

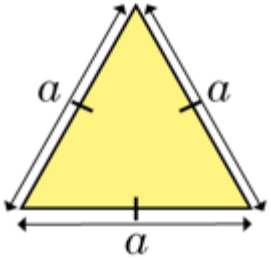


c)

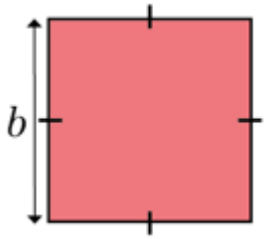


INTELLIGENT PRACTICE

Write an expressions to find the perimeter of each of these regular shapes:

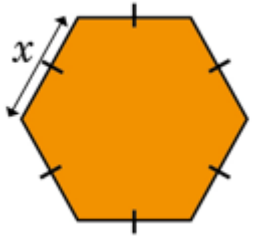


3a

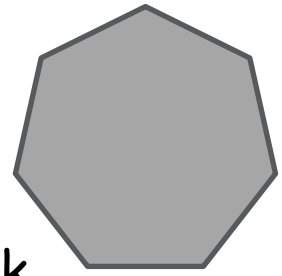


4b

Write an expressions to find the perimeter of each of these regular shapes:



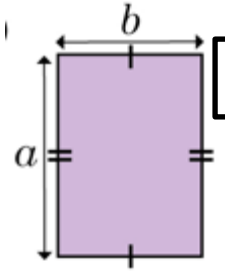
6x



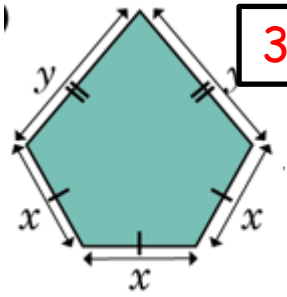
k

7k

Write an expression to find the perimeter of the following shapes:



2a+2b



3x+2y

area of square = b^2

area of rectangle = a x b

3 B4 Me: Think carefully about the labels you could add to each side.

DIVE DEEPER 1 - ANSWERS

1) Tommy uses multi-link cubes to represent an unknown number and base ten ones to represent 1.

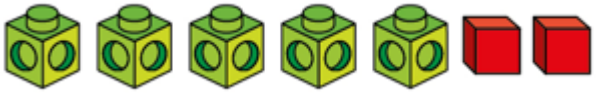
Write expressions to represent the following sets of cubes:

a)  2x + 3

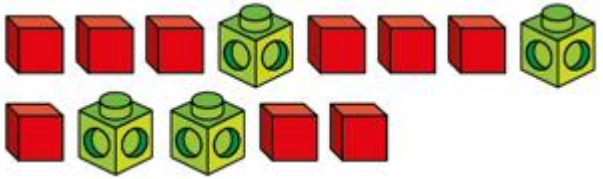
b)  3x + 5

c)  3x

d)  x + 3

e)  5x + 2

f)  6 + 2x

g)  4x + 9

DIVE DEEPER 2

2) Simplify the following expressions:
Here is an example:
2y + 5 + y = 3y + 5

a) 3a + a = 4a

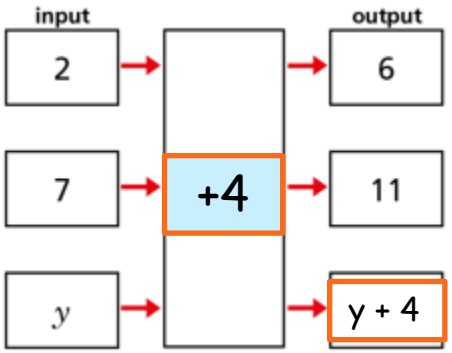
b) 6p – 2p = 4p

c) m + 4 – 3 = m + 1

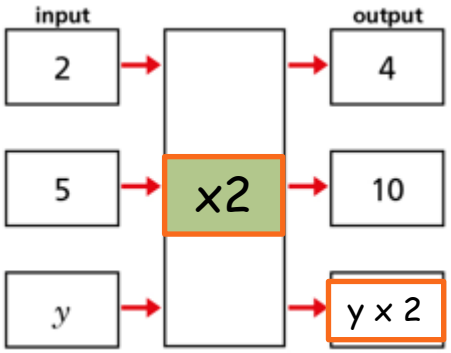
d) 7t - 4 + 5 = 7t + 1

3) Complete the function machines:

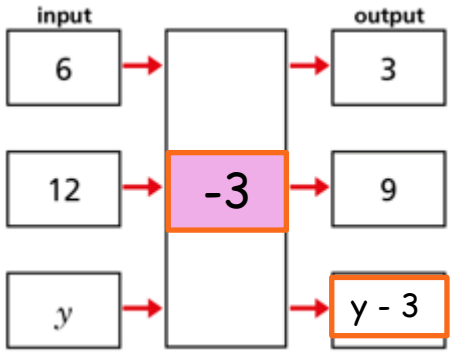
a)



b)

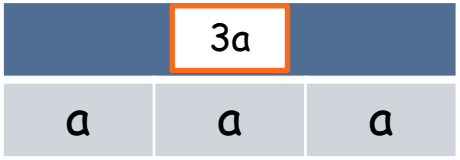


c)

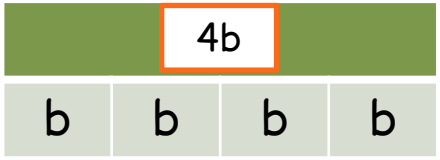


4) Complete the bar models:

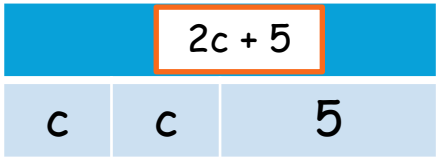
a)



b)

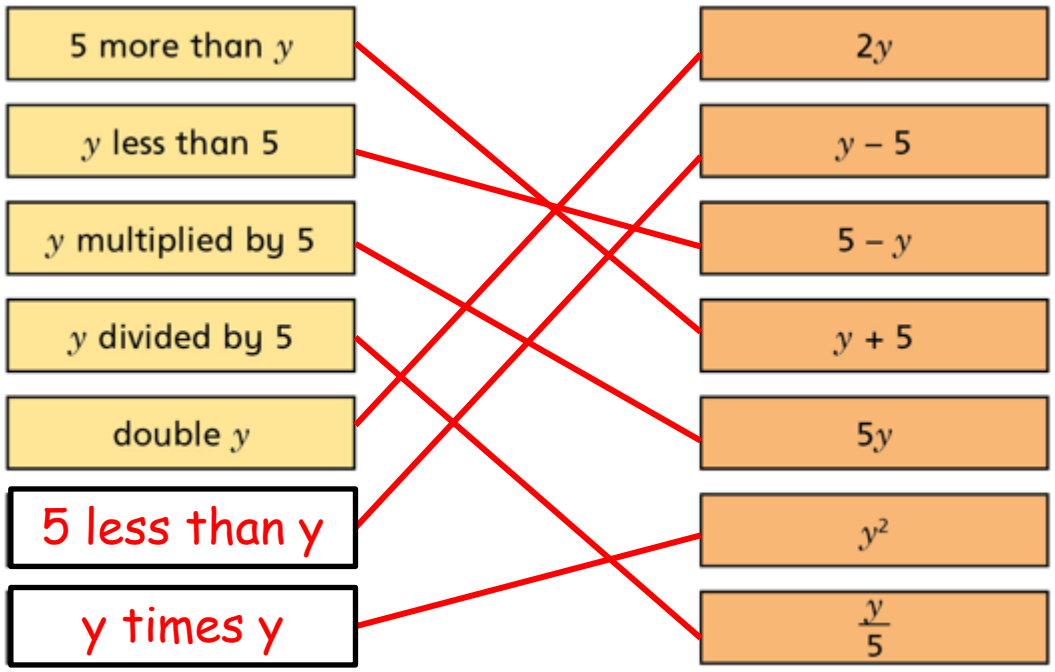


c)



DIVE DEEPER 3

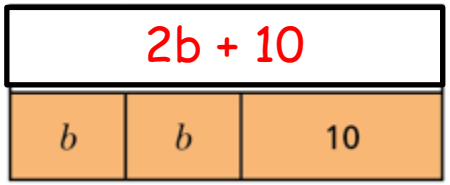
5) Match each statement to the equivalent expression:



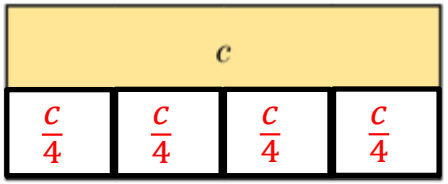
Can you write expressions for the missing two blocks?

6) Complete the bar models:

a)



b)



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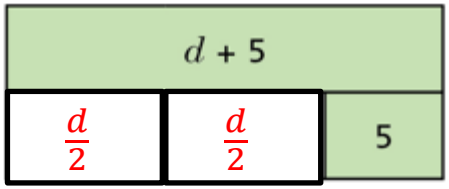

SELF-ASSESSMENT

- Some will even understand how to create and label bar diagrams to represent 2 expressions
- Some will match expressions with written descriptions
- Most will able to simplify expressions
- All will create expressions