

Chose values of  $x$  and use the equation to work out the values of  $y$ .

$$7x + 4 = y$$

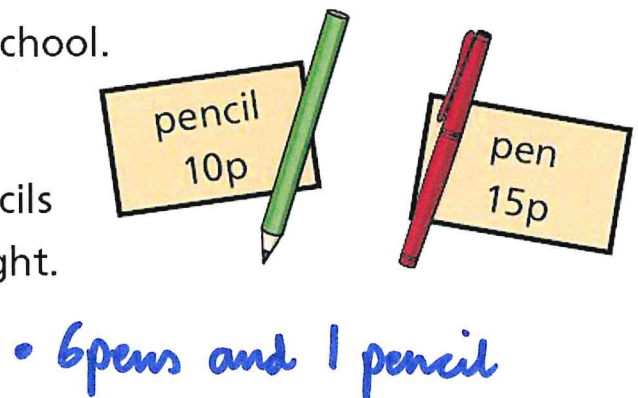
Value of $x$	Value of $y$

Aisha is buying some stationery for school.

She spends exactly £1

List the possible combinations of pencils and pens that Aisha could have bought.

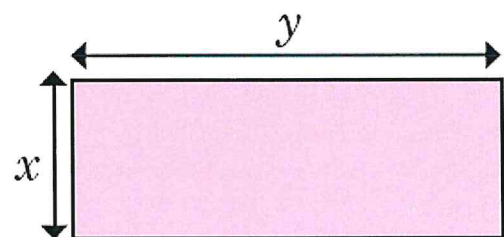
- 10 pencils
- 2 pens and 7 pencils
- 4 pens and 4 pencils



Here is a rectangle.

$x$  and  $y$  are both integers.

$$2x + 2y = 28$$



The rectangle has a perimeter of 28 cm.

List all the possible pairs of values for  $x$  and  $y$ .

$$x = 1 \quad y = 13$$

$$x = 2 \quad y = 12$$

$$x = 3 \quad y = 11$$

$$x = 4 \quad y = 10$$

$$x = 5 \quad y = 9$$

$$x = 6 \quad y = 8$$

$$ab + b = 18$$

Mo says,



$a$  and  $b$  must both be odd numbers

Is Mo correct? **No**  
Explain your answer.

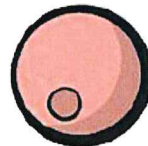
Incorrect because  
 $a$  could be 2  
 $b$  would be 6  
and they are even numbers.

Large beads cost 5p and small beads cost 4p

Rosie has 79p to spend on beads.



4p



5p

Possible answers:

$$3L + 16S$$

$$7L + 11S$$

$$11L + 6S$$

$$15L + S$$

How many different combinations of small and large beads can Rosie buy?

Can you write expressions that show all the solutions?

Class 6 are trying to solve a number puzzle.

$$\triangle + \triangle + \bigcirc = 10$$

a)



Dexter

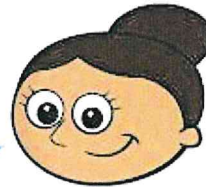
The triangle could be 3 and the circle could be 4

Do you agree with Dexter? Yes

Explain why.  $3 + 3 + 4 = 10$

b)

The triangle is worth 4



Dora

What is the value of the circle in Dora's number puzzle?

$$\bigcirc = 2$$

c) Find other pairs of values that the triangle and circle could equal.

Find three pairs.

$$\triangle = 1 \quad \bigcirc = 8$$

$$\triangle = 5 \quad \bigcirc = 0$$

$$\triangle = 2 \quad \bigcirc = 6$$

