

$a$  and  $b$  are whole numbers.

$$a + b = 8$$

Complete the table to show different possible values for  $a$  and  $b$ .

$a$	0	1	2	3	4	5	6	7
$b$	8	7	6	5	4	3	2	1
$a + b$	8	8	8	8	8	8	8	8

What patterns do you notice?

$X$  and  $Y$  are whole numbers.

- $X$  is a one digit odd number.
- $Y$  is a two digit even number.
- $X + Y = 25$

Find all the possible pairs of numbers that satisfy the equation.

$x$	$y$
1	24
3	22
5	20
7	18
9	16

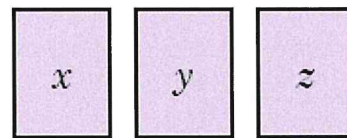
$a$  and  $b$  are integers.

$$ab = 24$$

List all the possible values for  $a$  and  $b$ .

$a$	1	2	3	4	6	8	12	24
$b$	24	12	8	6	4	3	2	1

Rosie has three number cards.



- The sum of the cards is 12
- $x$  is greater than  $y$  and  $y$  is greater than  $z$ .
- All the numbers are greater than zero.

List all the possible values of  $x$ ,  $y$  and  $z$ .

$x$	9	8	7	6	7	6	5
$y$	2	3	4	5	3	4	4
$z$	1	1	1	1	2	2	3

$x$  and  $y$  are both positive whole numbers.

$$\frac{x}{y} = 4$$

Dora says,



$x$  will always be a multiple of 4

Jack says,



$y$  will always be a factor of 4

Only one is correct – who is it?  
Explain your answer.



Dora is correct  
as  $x$  will always  
have to divide  
into 4 equal parts.

Jack is incorrect  
 $40 \div 10 = 4$  and  
10 is not a factor  
of 4

Here is an equation.

$$\text{circle} + \text{square} = 12$$

Find six possible pairs of values for the circle and square.

	1	2	3	4	5	6
	11	10	9	8	7	6

Here is another equation.

$$x + y = 12$$

Find six possible pairs of values for  $x$  and  $y$ .

$x$	1	2	3	4	5	6
$y$	11	10	9	8	7	6

$a$  and  $b$  are variables:

$$a + b = 6$$

There are lots of possible solutions to This equation.

Find 5 different possible integer values for  $a$  and  $b$ .

$a$	$b$
1	5
2	4
3	3
4	2
5	1