

# Satisfy an Equation with Two Unknowns

Sometimes equations will have two unknown numbers.

$$a + b = 25$$

In an equation with two unknown numbers, there may be more than one way to satisfy the equation.

$$24 + 1 = 25$$

$$10 + 15 = 25$$

$$20 + 5 = 25$$

We can record the pairs of numbers that satisfy an equation in a table.

a	24	23	22	21	20	...
b	1	2	3	4	5	...

- Sometimes you may be asked to find **all the possible** pairs of numbers that satisfy an equation.
- Sometimes you may be asked to **give a specified number of possibilities**.
- Sometimes you might be **given information about the values** of the unknown numbers which limits the possibilities.

Find the possible values of the unknown numbers when they are both whole numbers between 10 and 15.

$$a + b = 25$$

a	10	11	12
b	15	14	13