## Equations with one unknown



## Find the value of the letter in the following equations:

$$15 + 54 = a$$

$$b + 17 = 40$$

$$65 - a = 35$$

$$b - 30 = 78$$

$$a = 12 + 43$$

$$15b + 10 = 610$$

$$4b = 88$$

$$2a = 96$$

$$15c = 300$$

$$a-27=0$$

$$27 + c = 59$$

$$4a = 60$$

$$90 = a \div 2$$

$$10b \div 5 = 10$$

$$20c \div 2 = 50$$

$$25 = 5a$$

$$42 + c = 80 - 25$$

$$2b - 80 = 20$$

## Use algebra to solve these number problems:

- 1. Sam is 4 years younger than Sienna. Write an equation that shows how old Sam is when Sienna is 15 years old. Use the letter a to represent Sam's age.
- 2. There are 24 pupils in Oscar's class. 11 pupils are girls. Write an equation that shows how many boys there are in his class. Use the letter  $\boldsymbol{b}$  to represent the number of boys.
- 3. Jenny saves £2 a month. Write an equation that shows how long it would take her to save £16? Use the letter *m* to represent the number of months.
- 4. Raj's mother was 25 years old when he was born. Write an equation that shows how old Raj was when she was 32? Use the letter y to represent Raj's age.

Now work out how old Raj was when his mother was:

a) 35

b) 39

c) 42