Be able to solve an equation

A

$4x - 6 = 6$
$4x = 12$
$x = 3$

4. 

Tony has £8 and David has £x. Together they have £17.

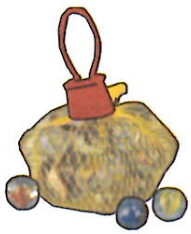
a Make up an equation using this information.

b Now solve it to determine how much David has.

5. There were x marbles in a bag. 7 were removed.
I then found that there were 14 left.

a Make up an equation about the marbles.

b Now solve it to determine how many there were to begin with.



6. For each of the following :- (i) make an equation and (ii) solve it.

a 

Chad has x pencils in his case. Harry has 14 pencils.
Altogether they have 31 pencils.

b Eliose has to cycle 2·3 kilometres to school.
Franz has to walk y kilometres.
They travel a total of 3·1 kilometres.

c 

Tom cycles from his house to the park then to the beach, a total of 34 kilometres.
From his house to the park is 20 km.
The park to the beach is p kilometres.

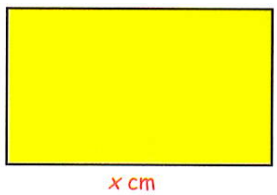
7. To find the area of a rectangle you **multiply** its length by its breadth.

a Write down an expression for the area of this rectangle in terms of x.

b If the actual area is 24 cm^2,

(i) write down an equation involving x,

(ii) solve it to find the value of x.



8. Find the value of x in each case :-

a	$\frac{1}{2}x = 7$	b	$\frac{1}{3}x = 9$	c	$\frac{1}{4}x = 20$
d	$\frac{1}{5}x = 10$	e	$\frac{1}{10}x = 5$	f	$\frac{1}{8}x = 2$
g	$\frac{1}{6}x = 11$	h	$\frac{1}{5}x = 20$	i	$\frac{1}{2}x = 3\frac{1}{2}$
j	$\frac{1}{2}x + 1 = 6$	k	$\frac{1}{3}x - 4 = 2$	l	$\frac{1}{4}x - 2 = 1$
m	$\frac{1}{2}x - 2 = 1$	n	$\frac{1}{5}x + 1 = 3$	o	$\frac{1}{10}x - 10 = 10.$