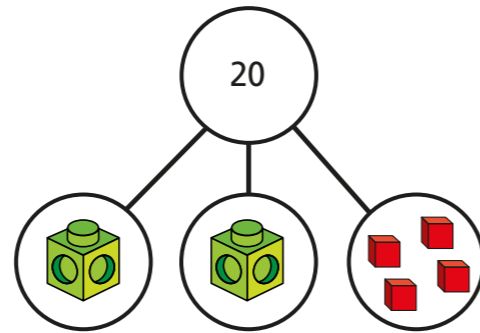# Solve two-step equations

1 Here is a part-whole model.
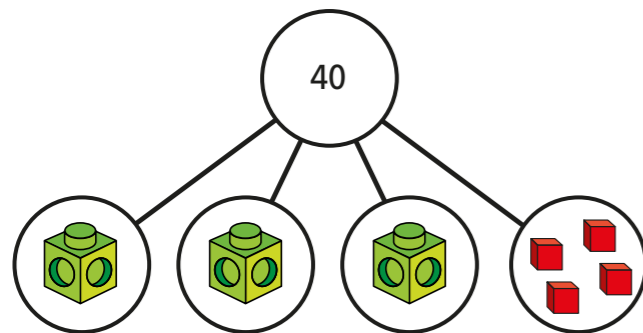
20

a) Write an equation for the part-whole model.

_____

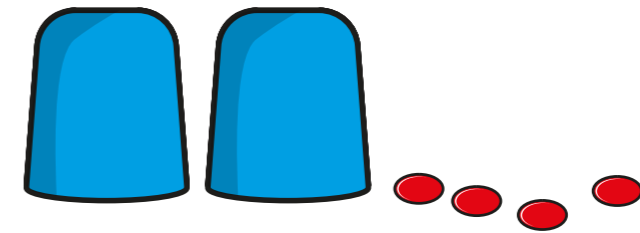**b)** Solve the equation to work out the value of

= ☐

2 If each multilink cube represents x, form and solve an equation to find the value x.

40

$x =$ ☐

3 There is the same number of counters under each cup.
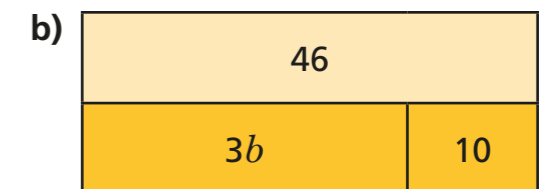
There are 16 counters in total.

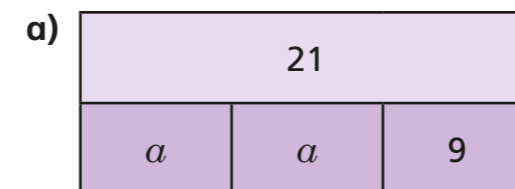**a)** Use y to represent the number of counters under each cup. Write an equation in terms of y.

_____

b) Solve the equation to find the value of y.

$y =$ ☐

c) How many counters are under each cup?

☐

4 Write an algebraic equation to represent each bar model. Find the values of a and b.

a)

21		
a	a	9

b)

46	
$3b$	10

$a =$ ☐

$b =$ ☐

5 Solve the equations.

a) $5x + 1 = 31$

d) $9 = 2y + 8$

$x = \boxed{}$

$y = \boxed{}$

b) $3x - 3 = 9$

e) $10g - 2 = 46$

$x = \boxed{}$

$g = \boxed{}$

c) $4p - 11 = 3$

f) $4 + 3y = 28$

$p = \boxed{}$
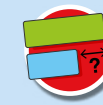
$y = \boxed{}$

6 Dani thinks of a number.

She doubles it and adds 3

She gets the answer 15

a) Write an equation to represent Dani's problem.

_____

b) Solve the equation to find her number.

$\boxed{}$

7 Alex is y years old.

Her friend Brett is 3 years older.

The total of their ages is 25

How old are Alex and Brett?

Alex is $\boxed{}$ Brett is $\boxed{}$

8

£1.52   £1.20

a) Work out the cost of one banana and one orange.

One banana costs $\boxed{}$ One orange costs $\boxed{}$

b) Compare methods with a partner.