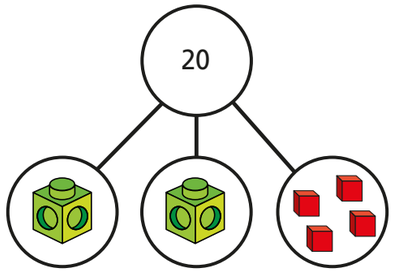
Solve two-step equations

1 Here is a part-whole model.



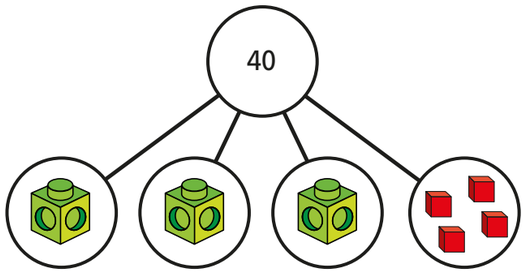
a) Write an equation for the part-whole model.

$2a + 4 = 20$

b) Solve the equation to work out the value of 

 = 8

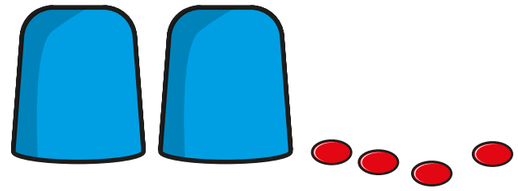
2 If each multilink cube represents x, form and solve an equation to find the value x.



$x =$ 12

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.

$2y + 4 = 16$

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

$y =$ 6

c) How many counters are under each cup? 6

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

$a =$ 6

$b =$ 12

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5 Solve the equations.

a) $5x + 1 = 31$

$x =$ 6

b) $3x - 3 = 9$

$x =$ 4

c) $4p - 11 = 3$

$p =$ 3·5

d) $9 = 2y + 8$

$y =$ 0·5

e) $10g - 2 = 46$

$g =$ 4·8

f) $4 + 3y = 28$

$y =$ 8

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.

$2x + 3 = 15$

b) Solve the equation to find her number.

6

7 Alex is y years old.

Her friend Brett is 3 years older.

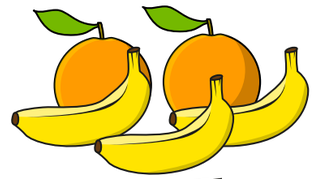
The total of their ages is 25

How old are Alex and Brett?

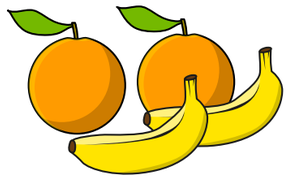
Alex is 11

Brett is 14

8



£1.52



£1.20

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

One banana costs 32p

One orange costs 28p

b) Compare methods with a partner.

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