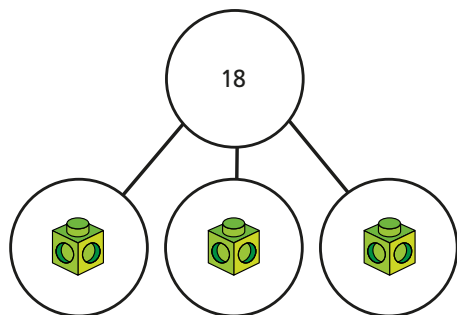
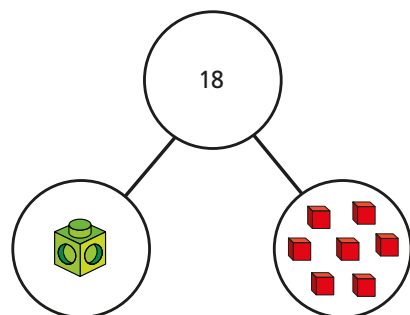


1 Match each equation to the part-whole model it represents.

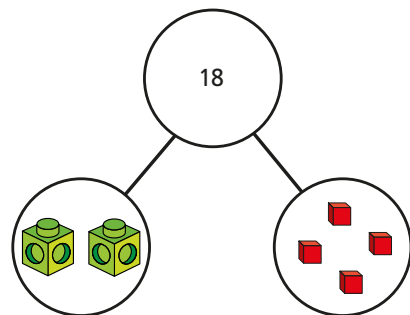
$$y + 7 = 18$$



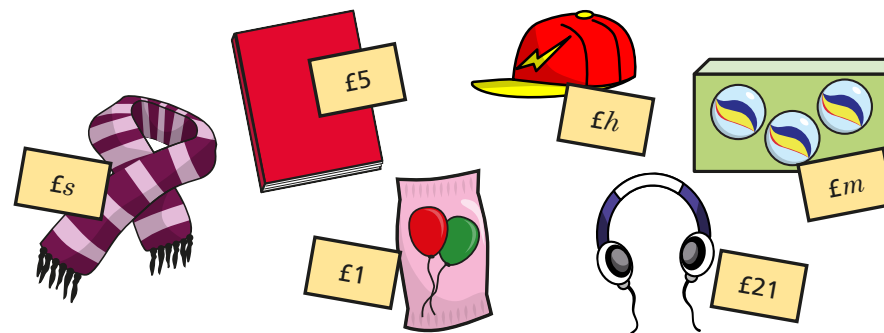
$$2y + 4 = 18$$



$$3y = 18$$

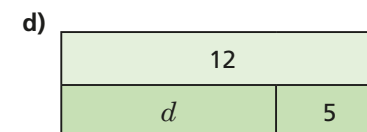
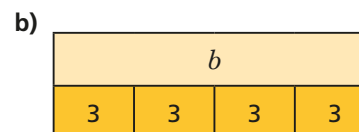
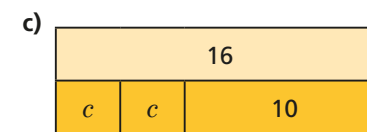
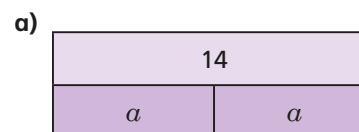


2 A shop sells these items.



- The total cost of a scarf and a book is £17
Form an equation to represent this information.
- The total cost of 2 packets of balloons and a hat is £11
Form an equation to represent this information.
- The total cost of a pair of headphones, a scarf and 2 boxes of marbles is £39
Form an equation to represent this information.
Create your own problem like this for a partner.

3 Write equations to represent the bar models.



Is there more than one possible equation for each?

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- b) The total cost of 2 packets of balloons and a hat is £11
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Form an equation to represent this information.
Create your own problem like this for a partner.

3 Write equations to represent the bar models.

14	
a	a

16		
c	c	10

b			
3	3	3	3

12	
d	5

Is there more than one possible equation for each?

4 Draw a bar model to represent each equation.

a) $3a = 21$ b) $2b + 6 = 10$ c) $6 + 9 = c$ d) $\frac{d}{2} = 7$

5 Tommy and Rosie are thinking of a number each.
Write an equation to represent each problem.

I subtract 3 from my number. I get the answer 10

I have doubled my number and added 5. My answer is 19

6 Annie has a number trick.

Whatever number you choose, I will make your answer be 5

Here is Annie's trick.

- a) Pick a starting number and follow the steps.
Did you get the answer 5?
- b) Use multilink cubes and base 10 ones to represent each step of Annie's trick.

Step 1: think of a number
Step 2: double it
Step 3: add 10
Step 4: divide by 2
Step 5: take away the number you first thought of

- What do you notice?
- c) Write an expression for each step of Annie's trick.
- d) Create your own problem like this for a friend.