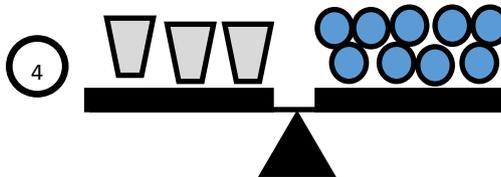
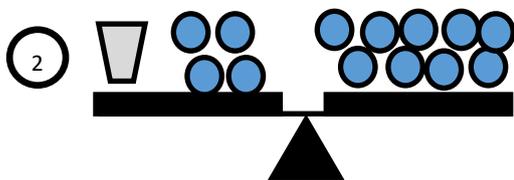
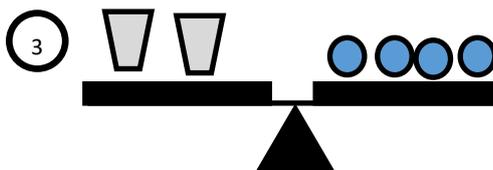
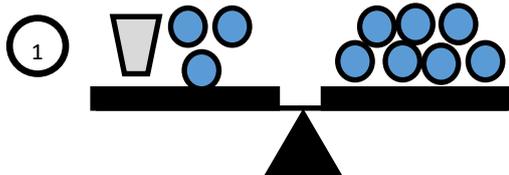


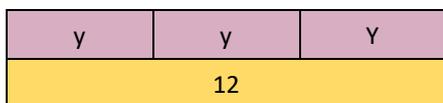
A

One-step problems In each problem the cup (a) can be worth a different amount.

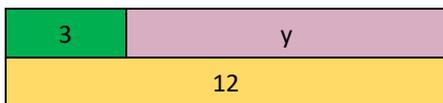
Record an equation for each scale and solve it.



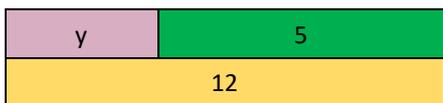
Match the bar model to an equation. Then find the value of y.



$$y + 5 = 12$$



$$3y = 12$$

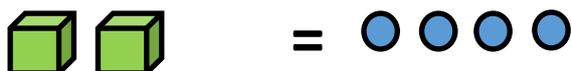


$$12 = 3 + y$$

Two-step problems An equation is represented below.



$$2b + 1 = 5$$



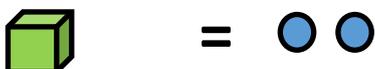
-1

-1

$$2b = 4$$

÷2

÷2



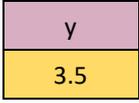
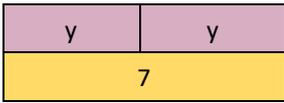
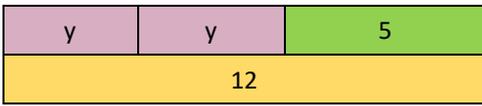
$$b = 2$$

Use this process to solve the equations below. You don't have to draw the pictures, but you do need to record each step (above right).

5 $4y + 2 = 6$

6 $9 = 2a + 5$

7 $1 + 5c = 16$



8 This is an example of an equation represented by a bar model. Write the different algebraic steps shown by the bar model.

Use the bar models method to solve the equations below:

9 $20 = 4h + 2$

10 $3f + 4 = 19$

Use your preferred method to solve the problems below:

11 $2a + 12 = 32$

12 $3b + 6 = 30$

13 $20 + 4c = 48$

14 $5d + 15 = 35$