

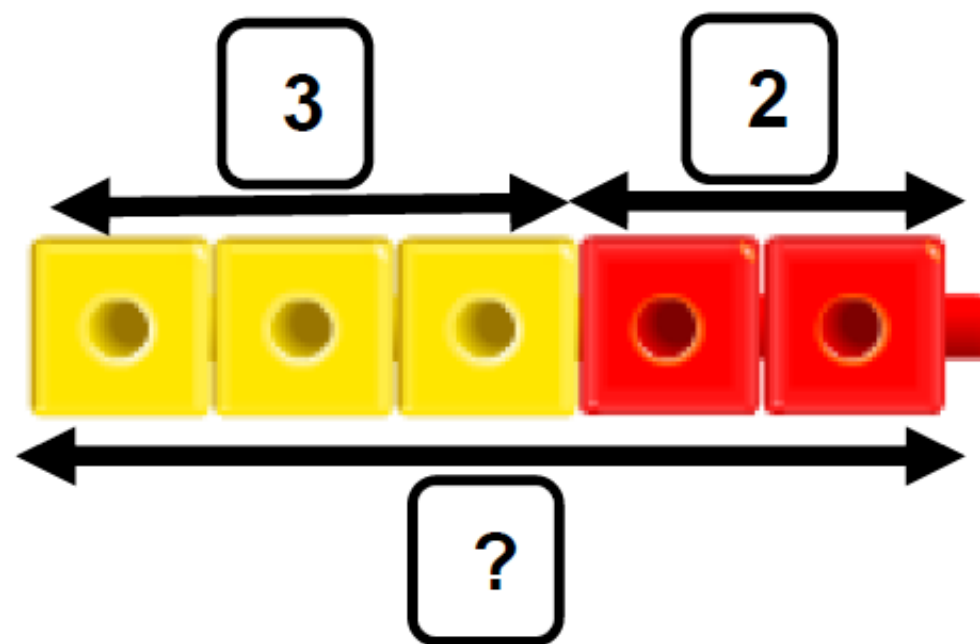
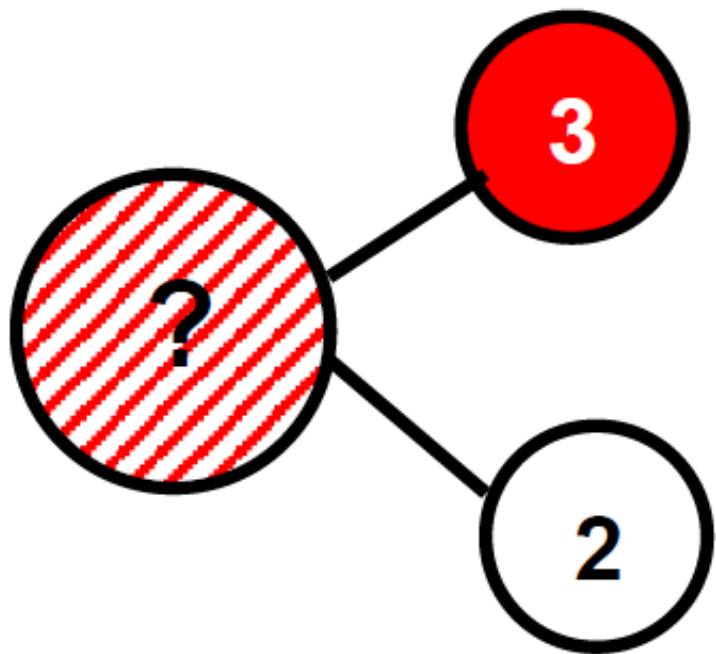
MATHEMATICS BAR MODEL

Addition and Subtraction

[Photo](#) by Tungsten / Public domain

Aggregation (Two quantities (parts) combined)

Three yellow sweets and two red sweets are on the table. How many sweets are on the table?

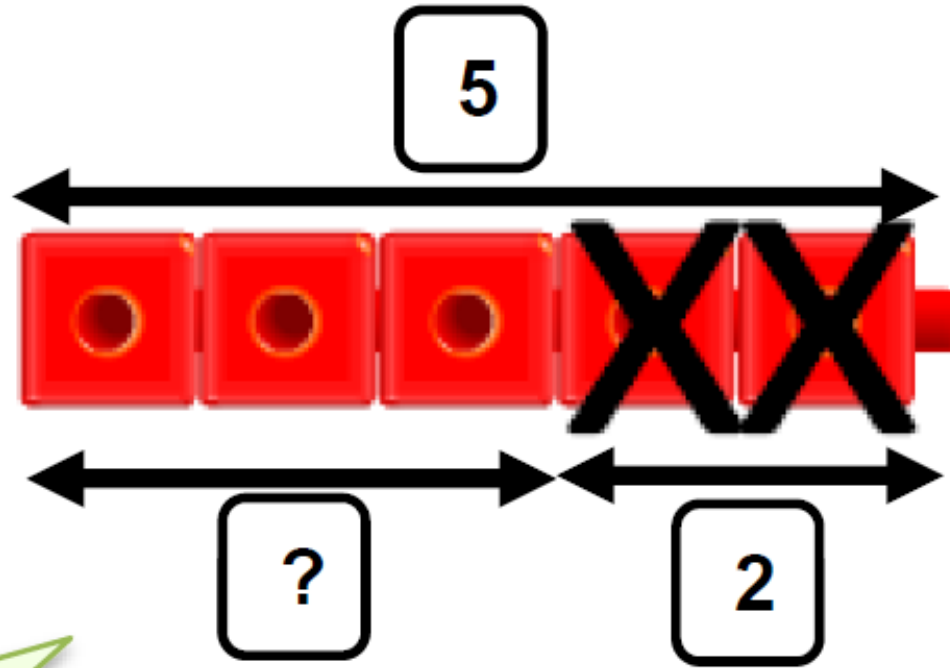
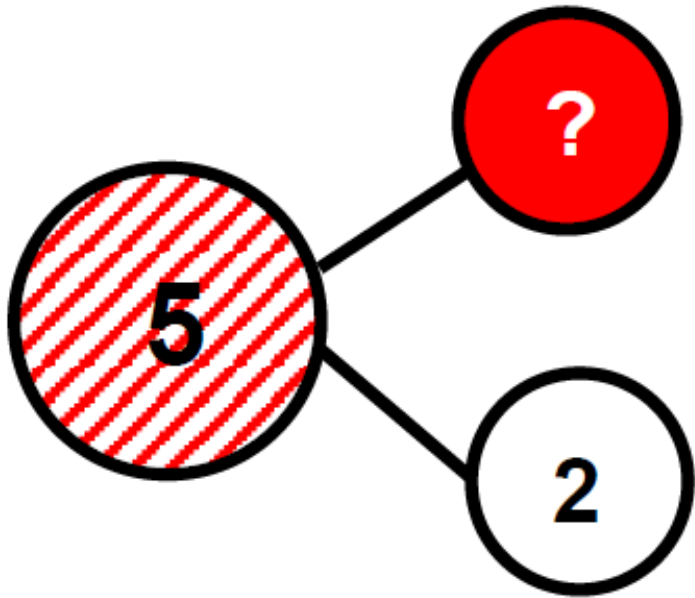


$$3 + 2 = 5$$

Three and two equals five.

Take away (One quantity is decreased by a provided amount)

Five sweets were on the table. Tom ate two sweets. How many sweets are on the table now?



$$5 - 2 = 3$$

Two fewer than five is three.
Three is two fewer than five.



- Y1
- Y2
- Y3
- Y4
- Y5
- Y6
- Calculation Policy
- Resources

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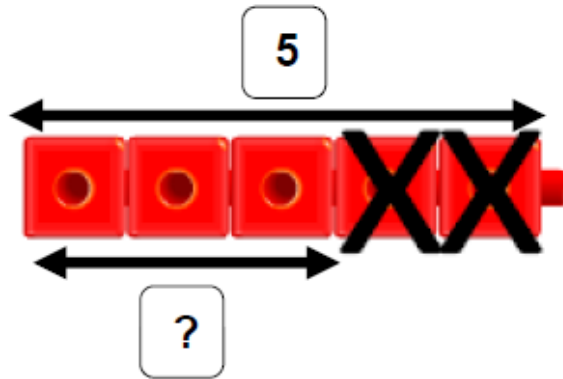
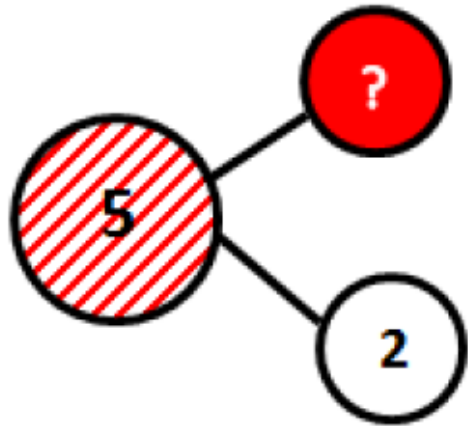


*Five sweets were on the table.
Tom ate two sweets. How many
sweets are on the table now?*

Subtraction

Take away (One quantity is decreased by a provided amount)

Five sweets were on the table. Tom ate two sweets. How many sweets are on the table now?



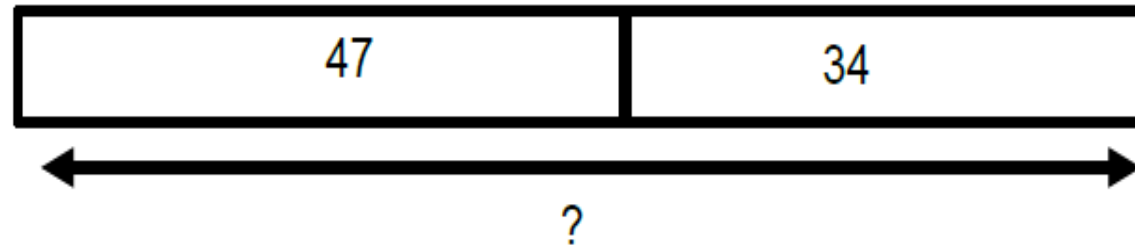
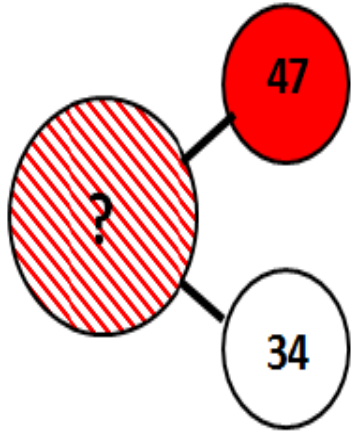
$$5 - 2 = 3$$
$$3 = 5 - 2$$

Two fewer than five is three.
Three is two fewer than five.

Amber has 47 pence and Isabel has 34 pence. How much do they have altogether?

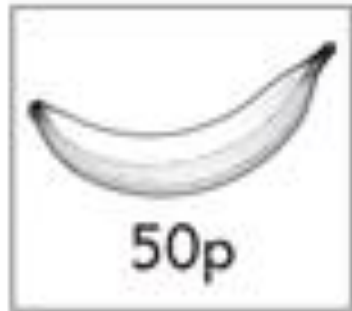
Addition (Aggregation)

Amber has 47 pence and Isabel has 34 pence. How much do they have altogether?



$$\begin{aligned}81 &= 34 + 47 \\47 + 34 &= 81 \\81 - 34 &= 47 \\81 - 47 &= 34 \\34 &= \square - 47\end{aligned}$$

34 more than 47 is 81.
81 is 47 more than 34.
47 fewer than 81 is 34.
34 is 47 fewer than 81.




Kemi buys **three different** fruits.

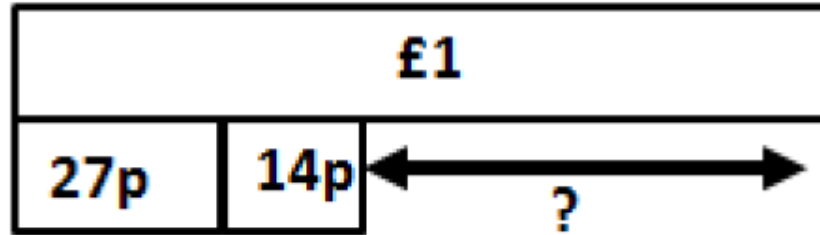
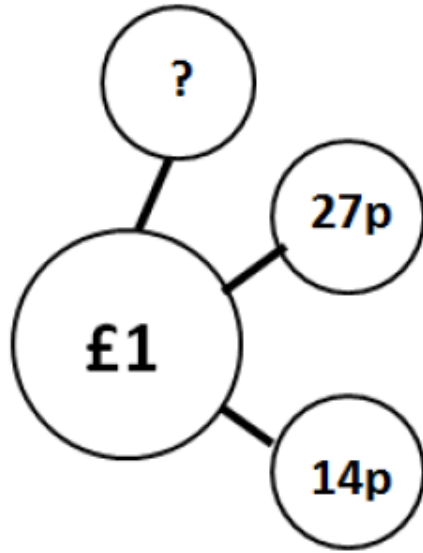
She spends exactly **£1**

Tick the **three** fruits that she buys.

Ellie has £1 pocket money. She spent 27p on a pen and 14p on a rubber. How much money does she have left?



Ellie has £1 pocket money. She spent 27p on a pen and 14p on a rubber. How much money does she have left?

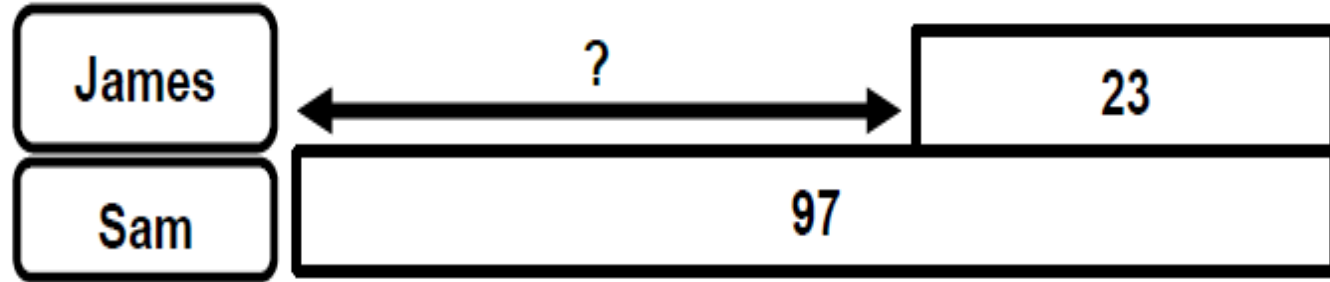


I think of a number then subtract 6. The answer is 5. What was my number?

Y2

James has collected 23 fewer football stickers than Sam. Sam has collected 97. How many football stickers has James collected?

James has collected 23 fewer football stickers than Sam. Sam has collected 97. How many football stickers has James collected?

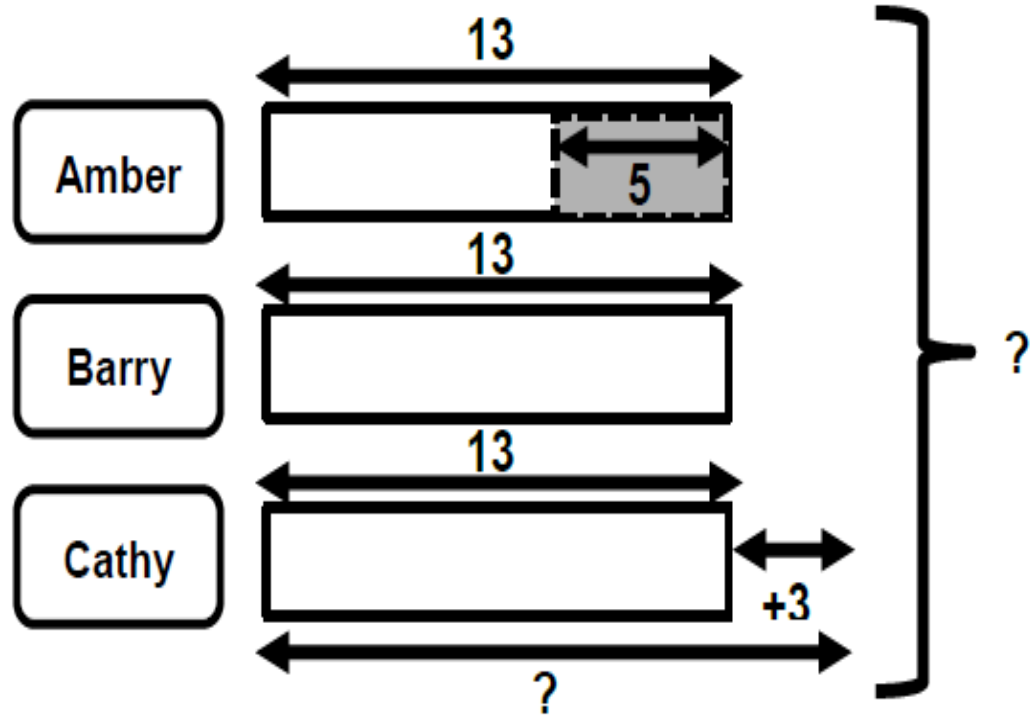


Amber, Barry and Cathy run a 50m race.

Barry's time is 13 seconds. Amber finishes 5 seconds before Barry.


Cathy finishes 3 seconds after Barry. What is Cathy's time?

Amber, Barry and Cathy run a 50m race.
Barry's time is 13 seconds. Amber finishes 5 seconds before Barry. Cathy finishes 3 seconds after Barry. What is Cathy's time?



What is the total time taken by all three children?

Every day, for 4 days, Sally scored 12.5 on her test. On her fifth day, she scored 14. What was her total score for the week?



Every day, for 4 days, Sally scored 12.5 on her test. On her fifth day, she scored 14. What was her total score for the week?

○ Step 1

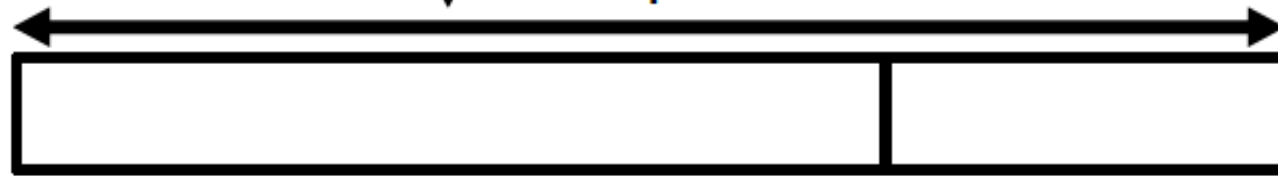


50



?

○ Step 2



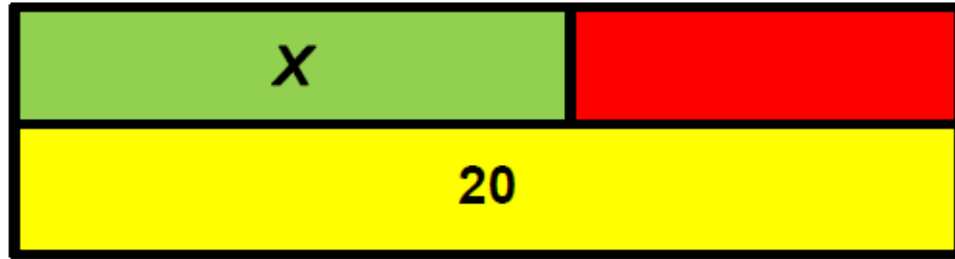
50

14

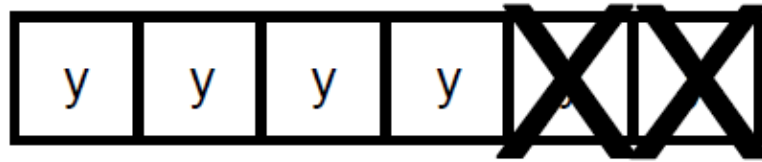
What is $2n + 9$ when $n = 22$



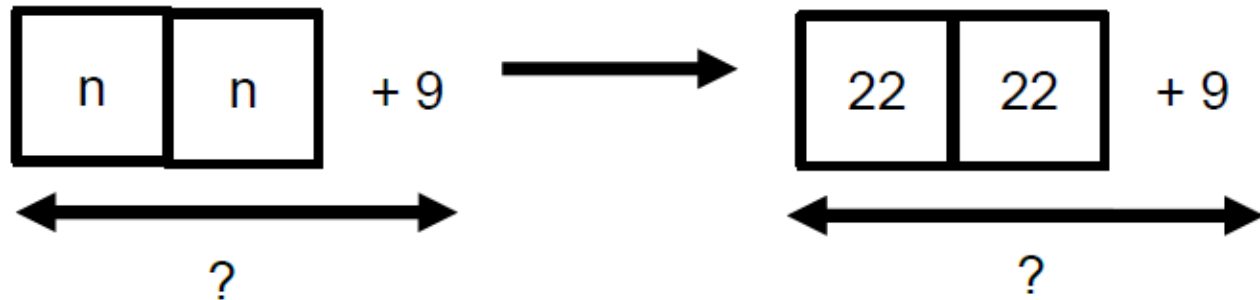
$$X + 5 = 20$$



$$6y - 2y = 4y$$



What is $2n + 9$ when $n = 22$



CALCULATION POLICY

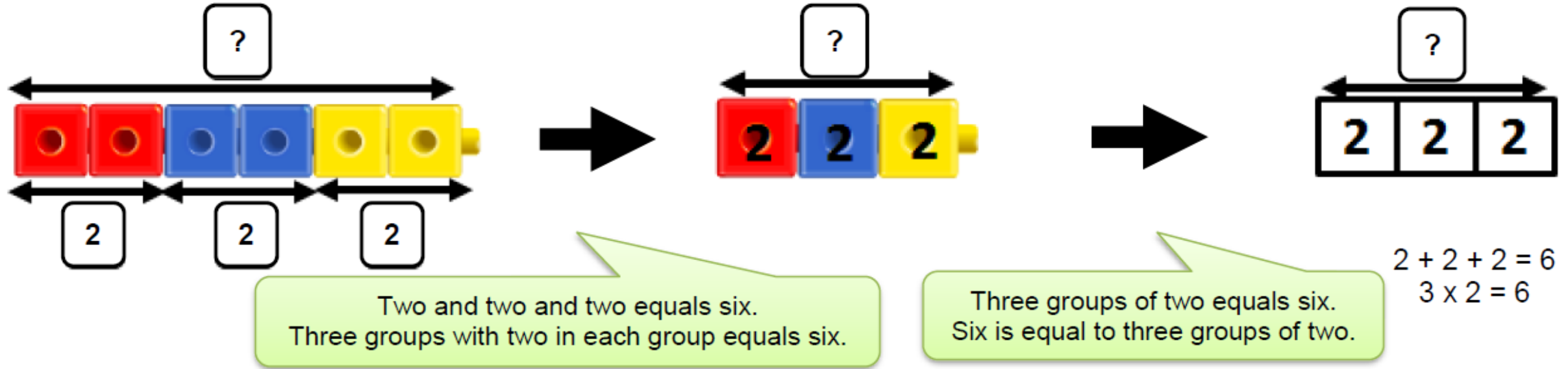
*Look in the slide notes
below for topics to
consider talking about*



*Multiplication
and Division*

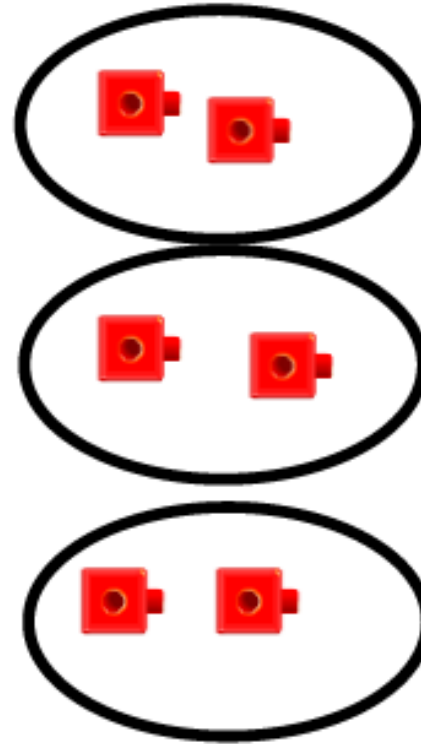
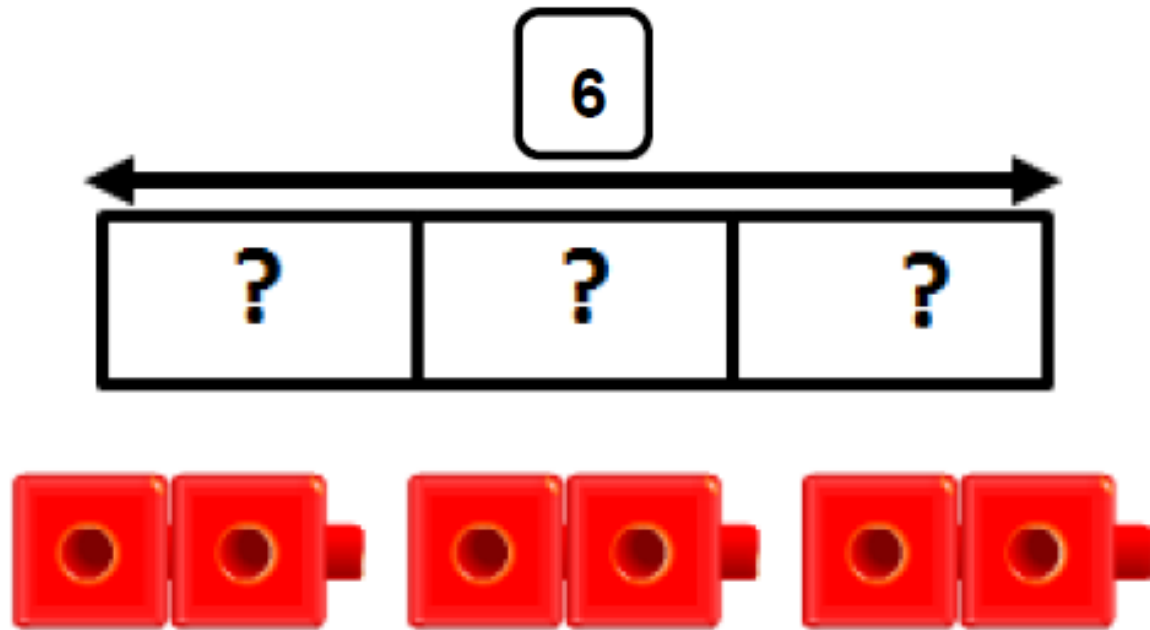
Multiplication - Group size and number of groups provided, product is unknown.

There are three boxes with two teddy bears in each box. How many teddy bears are in there is all?



Sharing – Product and number of groups is known, group size is unknown.

If six teddy bears are shared equally into 3 boxes, how many teddy bears will be in each box?

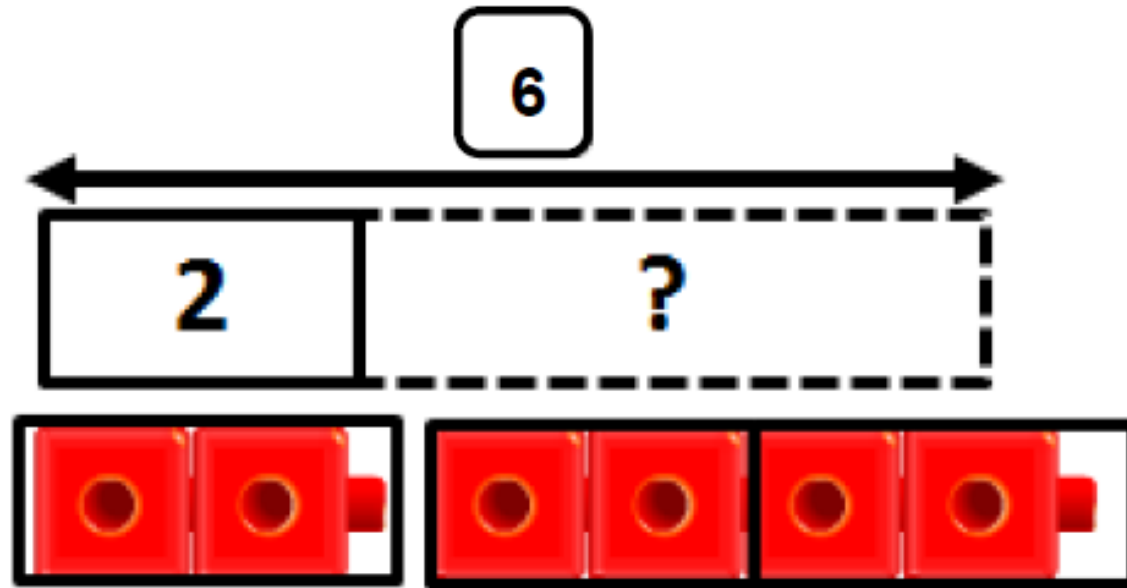


Six is equal to three groups with two in each group.

$$6 \div 3 = 2$$

Grouping – Product and groups size is known, number of groups is unknown.

If six teddy bears are to be packed 2 to a box, how many boxes are needed?



There are three twos in six.
Two can be taken from six, three times.
Three equal groups of two are equal to six.

$$6 - 2 - 2 - 2 = 0$$
$$6 \div 2 = 3$$