

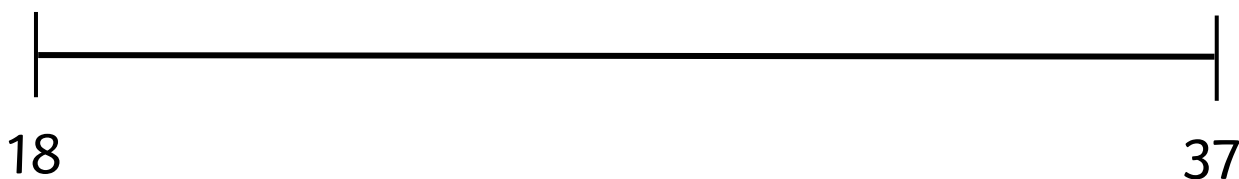


Subtraction – Number Line Method

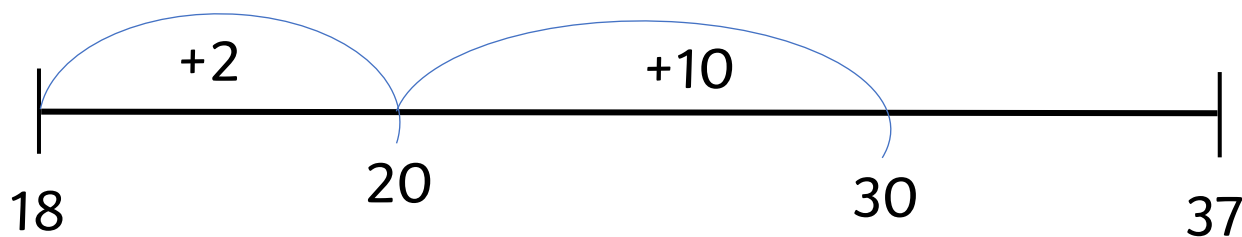
When children are trying to subtract a 2-digit number from a 2-digit number, we encourage them to use a number line.

e.g. $37 - 18 =$

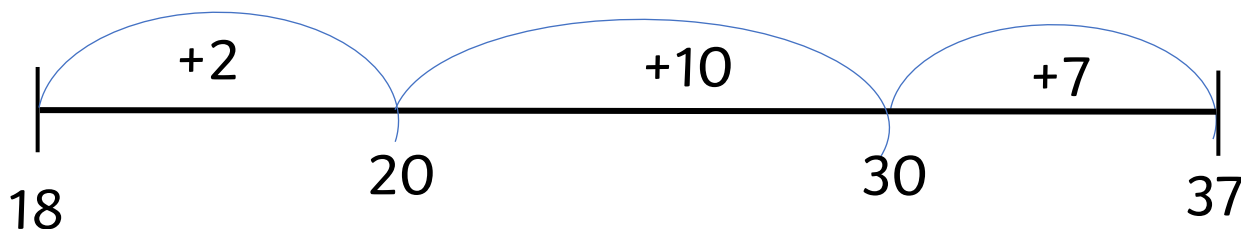
1. The children draw a long line with a ruler and write the largest number at the end and the smallest at the start (see below).



2. Then, they go to the start of the number line and try to get to the next ten. After, they try to get to the ten before the end number.



3. Then, they make the final jump to the end number. Once they have done this they add up the totals inside the jumps.



$2 + 10 + 7 = 19$ so $37 - 18 = 19$



Addition – SMILE Method

When children are trying to add a 2-digit number to a 2-digit number, we encourage them to use a method called SMILE addition.

e.g. $45 + 27 =$

1. The children first labels the tens digits and the ones digits by writing T and O above the numbers. Then they join the tens to the tens and the ones to the ones.

$$\begin{array}{cc} \text{T O} & \text{T O} \\ 45 & + 23 = \\ \hline \end{array}$$

2. Then, they add up the ones digits and add up the tens digits separately. We encourage them to write this down so their calculation is clear and they can check it after.

Ones: $5 + 3 = 8$

Tens: $40 + 20 = 60$

3. Finally, the children recombine the two separate answers they got when they added the tens and ones.

Recombine: $8 + 60 = 68$ **so** $45 + 23 = 68$



Multiplication – Drawing Rows Method

When children are trying to multiply numbers in a written method because they are not familiar with their times tables, we encourage them to draw rows.

e.g. $3 \times 4 =$

1. We get children to rephrase this by saying “3 rows of 4” and then they prepare 3 rows by labelling 3 ‘r’s.

r

r

r

2. Then, children draw the correct number of diagonal dashes in each row. As it was “3 rows of 4”, they need to put 4 in each row.

r / / / /

r / / / /

r / / / /

3. Finally they add up the total number of diagonal lines to get their answer.

so $3 \times 4 = 12$

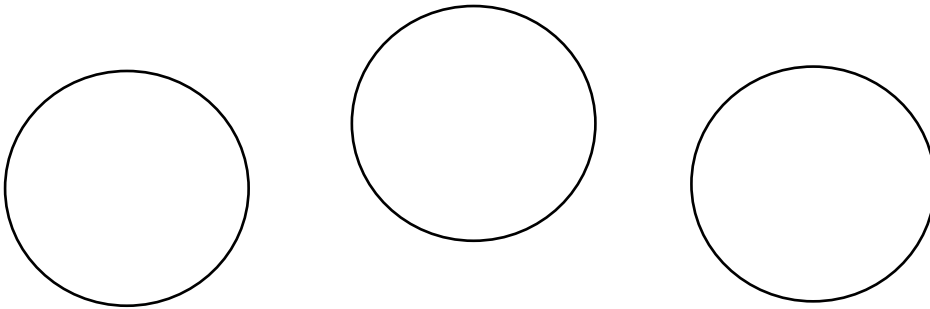


Division – Sharing Out Method

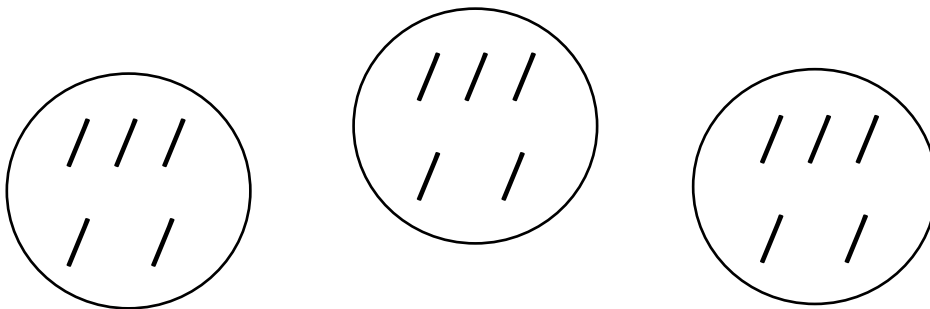
When children are trying to divide one number by another, we encourage them to share out in groups.

e.g. $15 \div 3 =$

1. We get children to rephrase this by saying “15 shared by 3”. As they realise that they are sharing by 3, they draw 3 groups.



2. Then, the children share out the largest amount between the plates by using dashes and putting one in each circle at a time while they count to 15.



3. Then, the children count up the number of dashes in one circle. They are encouraged to check by making sure all circles have an equal number.

so $15 \div 3 = 5$