

Stage 3

Addition

+ and = signs and missing numbers

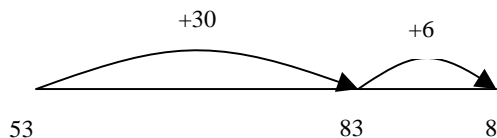
Continue using a range of equations as in Year 1 and 2 but with appropriate, larger numbers.

Partition into tens and ones and recombine

Partition both numbers and recombine as in year 2. (less able)

Begin with the most significant number and only partition the second number e.g.

$$\begin{aligned} 36 + 53 &= 53 + 30 + 6 \\ &= 83 + 6 \\ &= 89 \end{aligned}$$



$$\begin{aligned} 53 + 36 \\ 50 + 30 &= 80 \\ 3 + 6 &= 9 \\ &= 89 \end{aligned}$$

Beginning vertical presentation

$$83 + 42 = 125$$

more able

$$\begin{aligned} 80 + 3 \\ +40 + 2 \\ \hline 120 + 5 = 125 \end{aligned}$$

$$\begin{array}{r} 83 \\ + 42 \\ \hline 120 \\ 5 \\ \hline 125 \end{array}$$

Add a near multiple of 10 to a two-digit number

Continue as in Year 2 but with appropriate numbers

e.g. $35 + 19$ is the same as $35 + 20 - 1$.

Subtraction

- and = signs and missing numbers

Continue using a range of equations as in Year 2 but with appropriate numbers.

Find a small difference by counting up

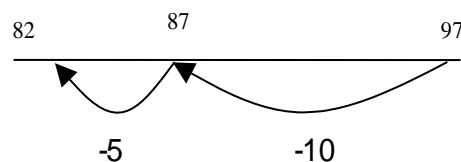
Continue as in Year 2 but with appropriate numbers e.g. $102 - 97 = 5$

Use known number facts and place value to

subtract

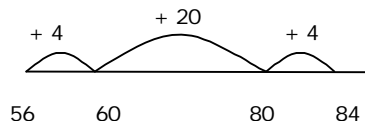
Continue as in Year 2 but with appropriate numbers e.g.

$$\begin{aligned} 97 - 15 &= 82 \\ 97 - 10 - 5 \end{aligned}$$



Complementary addition

$$84 - 56 = 28$$



Subtract mentally a 'near multiple of 10' to or from a two-digit number

Continue as in Year 2 but with appropriate numbers e.g. $78 - 49$ is the same as $78 - 50 + 1$

$$67 - 23$$

$$\begin{array}{r} 60 \ 7 \\ 20 \ 3 \\ \hline 40 \ 4 \end{array}$$

$$63 - 27$$

$$\begin{array}{r} 50 \\ \cancel{60} \ 13 \\ 20 \ 7 \\ \hline 30 \ 6 \end{array}$$

$$40 \ 4$$

$$30 \ 6$$

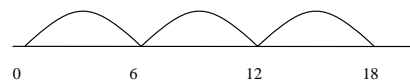
Multiplication

X and = signs and missing numbers

Continue using a range of equations as in Year 2 but with appropriate numbers.

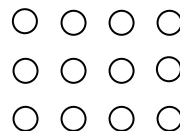
Number lines

$$3 \times 6$$



Arrays and repeated addition

Continue to understand multiplication as repeated addition and continue to use arrays (as in Year 2).



$$3 \times 4$$

$$4 \times 3$$

$$3 + 3 + 3 + 3$$

$$4 + 4 + 4$$

Doubling multiples of 5 up to 50

$$35 \times 2 = 70$$

Partition

$$\begin{array}{r|l|l} x & 30 & 5 \\ \hline 2 & 60 & 10 \end{array}$$

Use known facts and place value to carry out simple multiplications

Use the same method as above (partitioning), e.g. $32 \times 3 = 96$

$$\begin{array}{r|l|l} x & 30 & 2 \\ \hline 3 & 90 & 6 \end{array}$$

Division

÷ and = signs and missing numbers

Continue using a range of equations as in Year 2 but with appropriate numbers.

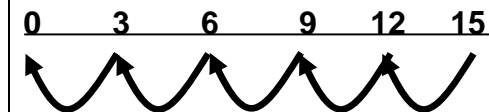
Understand division as sharing and grouping

$15 \div 3$ can be modelled as:

Sharing 15 shared between 3



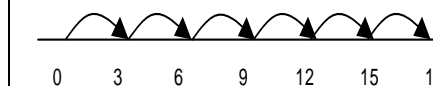
or



Or

$18 \div 3$ can be modelled as:

Grouping - How many 3's make 18?



Remainders

$$16 \div 3 = 5 \text{ r}1$$

Sharing - 16 shared between 3, how many left over?

Grouping - How many 3's make 16, how many left over?

e.g.

