Addition

$4 + 2 = 6$

0 1 2 3 4 5 6 7 8   4 5 6

$8 + 7 = 15$

8 9 10 11 12 13 14 15
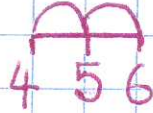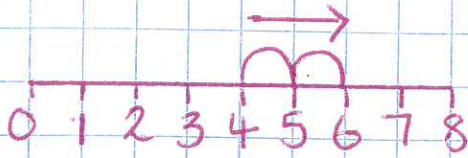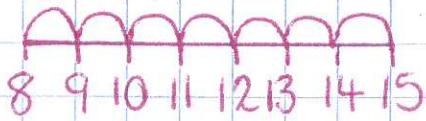
$41 + 8 = 49$

$$
\begin{array}{r}
40 + 1 \\
+ \quad\quad 8 \\
\hline
40 + 9 = 49
\end{array}
\qquad
\begin{array}{r}
41 \\
+ \quad 8 \\
\hline
49
\end{array}
$$

$211 + 138 = 349$

$$
\begin{array}{r}
200 + 10 + 1 \\
+ \quad 100 + 30 + 8 \\
\hline
300 + 40 + 9
\end{array}
\qquad
\begin{array}{r}
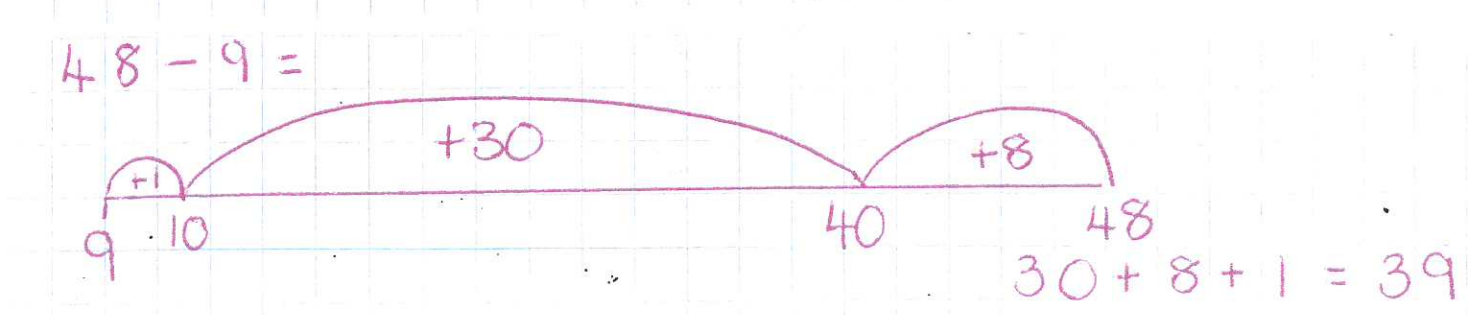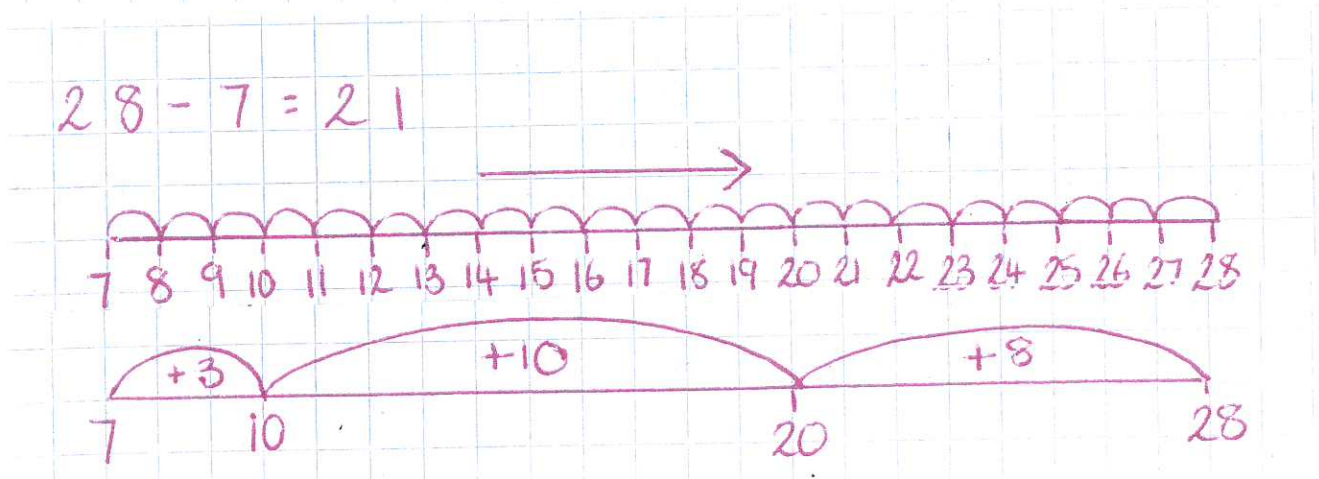211 \\
+ \quad 138 \\
\hline
349
\end{array}
$$

$294 + 138 = 432$

$$
\begin{array}{r}
200 + 90 + 4 \\
+ \quad 100 + 30 + 8 \\
\hline
300 + 120 + 12
\end{array}
\qquad
\begin{array}{r}
294 \\
+ \quad 138 \\
\hline
432 \\
 1 \ 1
\end{array}
$$

Please note these methods should be used alongside the White Rose guidance for concrete, pictorial and abstract approaches.

The written methods should be used alongside each other to show the children progression and make links (side by side).

Subtraction
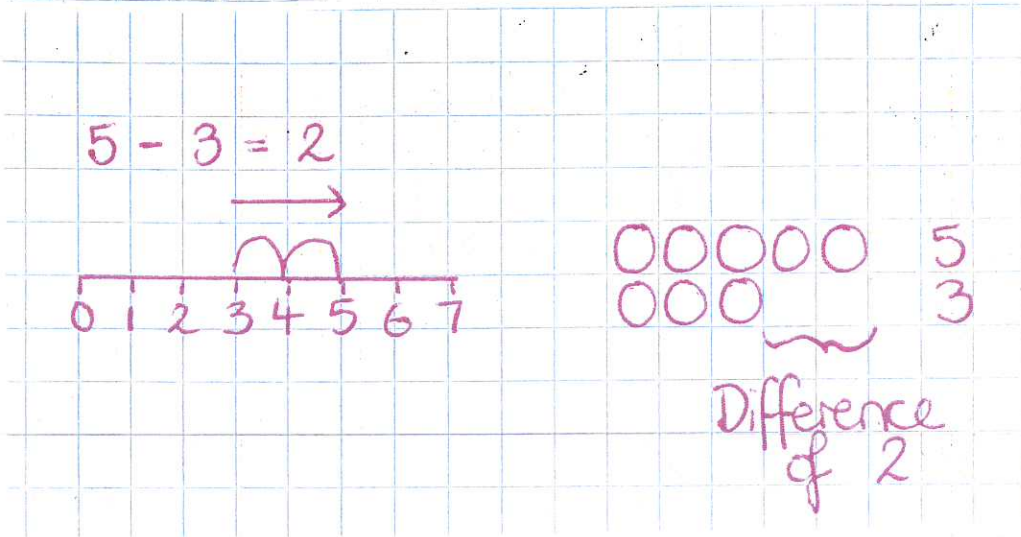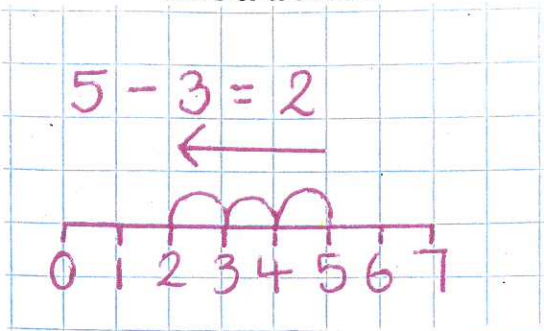
$5 - 3 = 2$

$5 - 3 = 2$

$\begin{array}{l} OOOOO \quad 5 \\ OOO \quad\quad 3 \end{array}$

Difference of 2

$28 - 7 = 21$

7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28

$+3$ $+10$ $+8$

7   10   20   28

$48 - 9 =$

$+30$ $+8$

$+1$

9 10   40   48

$30 + 8 + 1 = 39$

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$97 - 46 = 51$

$$+4 \qquad +40 \qquad +7$$
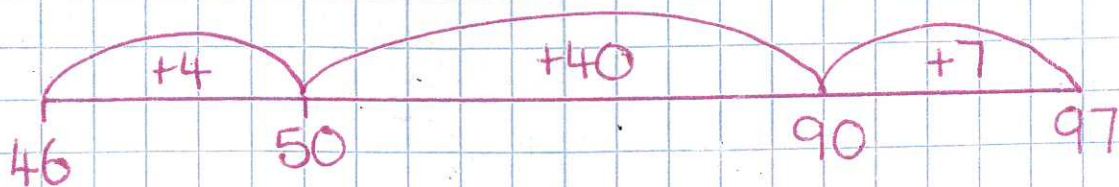$$46 \qquad 50 \qquad\qquad 90 \qquad 97$$

$40 + 7 + 4 = 51$

$796 - 432 = 364$

$$\begin{array}{r} 700 + 90 + 6 \\ -\ 400 + 30 + 2 \\ \hline 300 + 60 + 4 \end{array} \qquad = 364$$

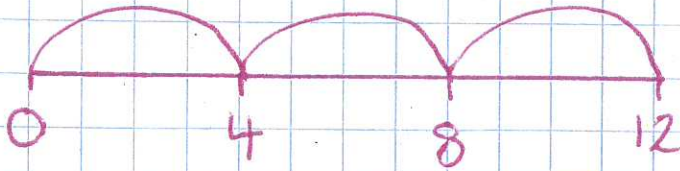$$\begin{array}{r} 796 \\ -\ 432 \\ \hline 364 \end{array}$$

$753 - 438 = 315$

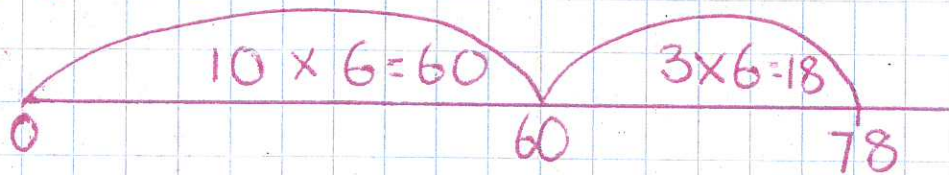$$\begin{array}{r} 40 \\ 700 + \cancel{50} + 13 \\ 400 + 30 + 8 \\ \hline 300 + 10 + 5 \end{array} \qquad = 315$$

$$\begin{array}{r} \overset{4}{7}\overset{}{5}13 \\ -\ 438 \\ \hline 315 \end{array}$$

Multiplication

$3 \times 4 = 12$

$13 \times 6 = 78$

$10 \times 6 = 60$ $3 \times 6 = 18$

$\times$	10	3	
6	60	18	$= 78$

$$\begin{array}{r} 1\ 3 \\ \times\ \underline{\quad 6} \\ 1\ 8 \quad (6 \times 3) \\ \underline{6\ 0} \quad (6 \times 1\ 0) \\ 7\ 8 \end{array}$$

$$\begin{array}{r} 1\ 3 \\ \times\ \underline{\quad 6} \\ 7\ 8 \\ 1 \end{array}$$
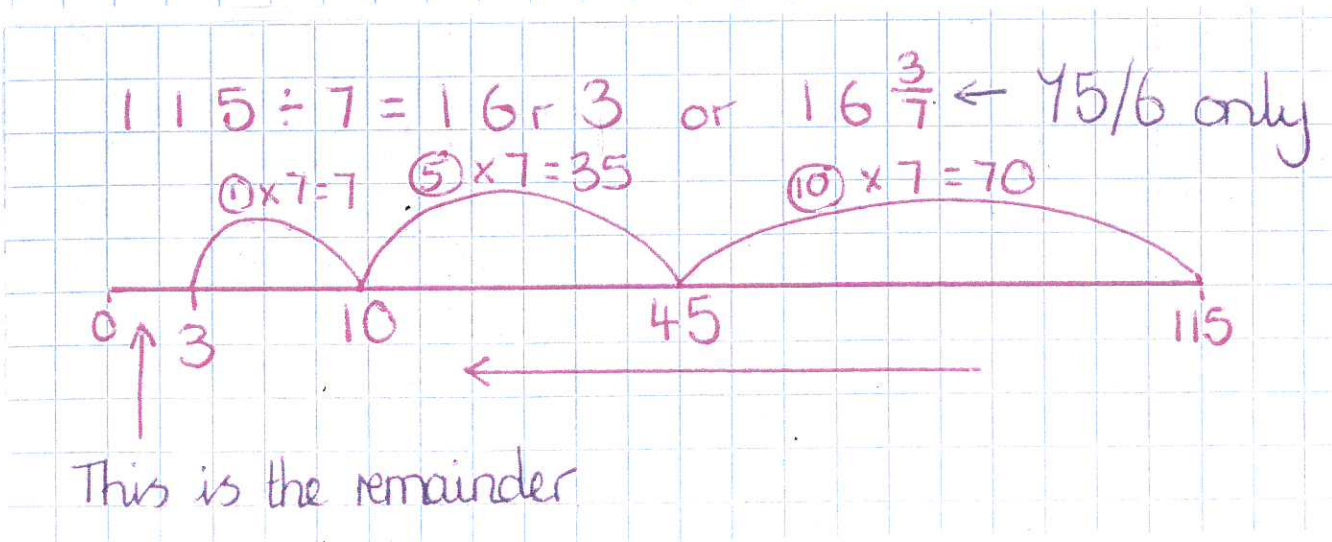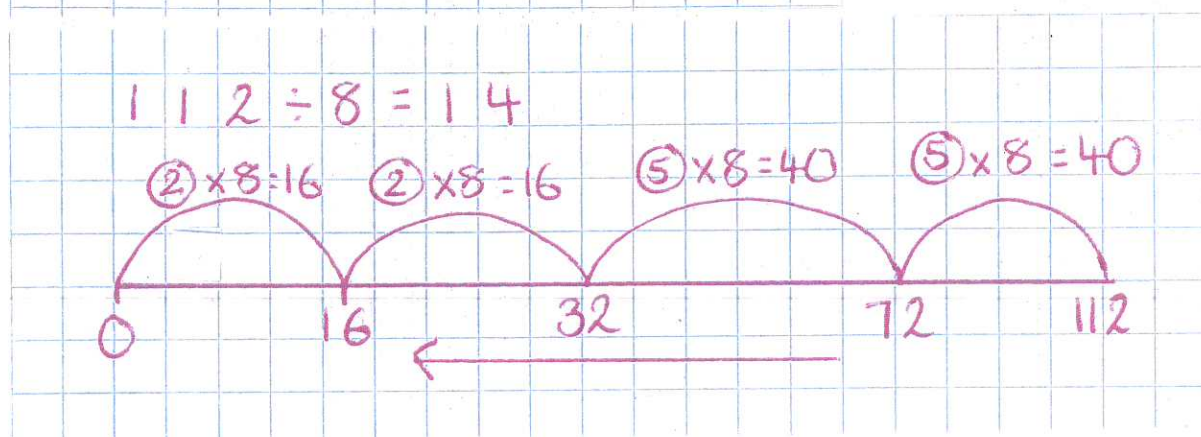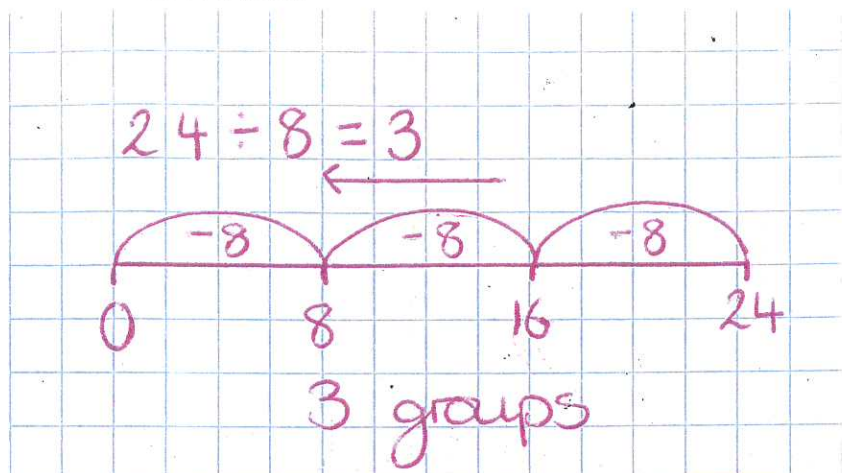
Cross out once used.

Please note these methods should be used alongside the White Rose guidance for concrete, pictorial and abstract approaches.
The written methods should be used alongside each other to show the children progression and make links (side by side).

$398 \times 27 = 10746$

```
      398
    ×  27
    2786
  +
    7960
  10746
```

Division

$24 \div 8 = 3$

$-8 \qquad -8 \qquad -8$

0   8   16   24

3 groups

$112 \div 8 = 14$

②×8=16   ②×8=16   ⑤×8=40   ⑤×8=40

0   16   32   72   112

$115 \div 7 = 16 \, r \, 3$ or $16\frac{3}{7}$ ← Y5/6 only

①×7=7   ⑤×7=35   ⑩×7=70

0 ↑ 3   10   45   115

This is the remainder

Please note these methods should be used alongside the White Rose guidance for concrete, pictorial and abstract approaches.
The written methods should be used alongside each other to show the children progression and make links (side by side).

$856 \div 8 = 107$

Known facts
8
16
24
32
40
48
56

$$\begin{array}{r} 107 \\ 8)\overline{85^56} \end{array}$$

$2587 \div 15 = 172 \text{ r } 7 \text{ or } 172\frac{7}{15}$ ← Year 5/6 only

$$\begin{array}{r} 17 \\ 15)\overline{2587} \\ -15\downarrow \\ \overline{108} \\ 105\downarrow \\ \overline{37} \\ 30 \\ \overline{7} \end{array}$$

15
15
30
45
60
75
90
105
120
135
150
165
180