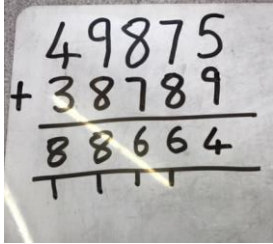
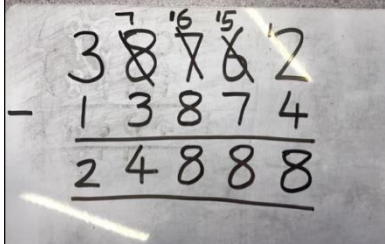




## Year 5/6 Calculation Policy

Addition	Subtraction	Multiplication	Division
<p><b>Column Addition</b> 789 + 642 becomes</p> $\begin{array}{r} 789 \\ + 642 \\ \hline 1431 \\ \hline 11 \end{array}$ <p>Answer: 1431</p> 	<p><b>Column Subtraction</b> 874 - 523 becomes</p> $\begin{array}{r} 874 \\ - 523 \\ \hline 351 \end{array}$ <p><b>Exchanging using column subtraction</b></p> 	<p><b>Short Multiplication</b> 24 x 6 becomes</p> $\begin{array}{r} 24 \\ \times 6 \\ \hline 144 \\ \hline 2 \end{array}$ <p>Answer: 144</p> <p>342 x 7 becomes</p> $\begin{array}{r} 342 \\ \times 7 \\ \hline 2394 \\ \hline 21 \end{array}$ <p>Answer: 2394</p>	<p><b>Short Division</b> 98 ÷ 7 becomes</p> $\begin{array}{r} 14 \\ 7 \overline{) 98} \\ \underline{7} \phantom{0} \\ 28 \\ \underline{28} \\ 0 \end{array}$ <p>Answer: 14</p> <p>432 ÷ 5 becomes</p> $\begin{array}{r} 86 \text{ r}2 \\ 5 \overline{) 432} \\ \underline{40} \phantom{0} \\ 32 \\ \underline{30} \\ 2 \end{array}$ <p>Answer: 86 remainder 2</p>

$$\begin{array}{r} 78.23 \\ + 41.87 \\ \hline 120.10 \\ \hline \end{array}$$

### Missing Numbers

$$\begin{array}{r} 4\Box74\Box \\ + \Box61\Box3 \\ \hline 109907 \\ \hline \end{array}$$

### Adding Fractions

Fractions:  
adding with  
the same denominator.

$$\frac{2}{12} + \frac{9}{12} = \frac{11}{12}$$

$$\frac{5}{8} + \frac{4}{8} = \frac{9}{8} = 1\frac{1}{8}$$

$$\begin{array}{r} 87.41 \\ 38.72 \\ \hline 49.69 \\ \hline \end{array}$$

### Missing Numbers

$$\begin{array}{r} 807\Box5 \\ 4\Box89\Box - \\ \hline \Box8874 \\ \hline \end{array}$$

### Subtracting Fractions

Fractions:  
subtracting with  
the same denominators.

$$\frac{4}{5} - \frac{2}{5} = \frac{2}{5}$$

$$\frac{8}{9} - \frac{5}{9} = \frac{3}{9} \text{ (simplified)} = \frac{1}{3} = 3$$

### Long Multiplication

#### Multiplying 2/3 digit numbers by 2 digit numbers

$$\begin{array}{r} 2137 \\ \quad 45 \times \\ \hline 10685 \\ 85480 \\ \hline 96165 \\ \hline \end{array}$$

$$\begin{array}{r} 320 \times 14 \\ \times 14 \\ \hline 1280 \\ 3200 \\ \hline 4480 \\ \hline \end{array}$$

### Long Division

#### Dividing by 2 digit numbers

$$\begin{array}{r} 0045 \\ 28 \overline{) 1260} \\ - 112 \downarrow \\ \hline 0140 \\ - 140 \\ \hline 0000 \end{array}$$

$1 \times 28 = 28$   
 $2 \times 28 = 56$   
 $3 \times 28 = 84$   
 $4 \times 28 = 112$   
 $5 \times 28 = 140$

$$\begin{array}{r} 0105 \frac{12}{26} \\ 26 \overline{) 2742} \\ - 26 \downarrow \downarrow \\ \hline 0142 \\ - 130 \\ \hline 012 \end{array}$$

$1 \times 26 = 26$   
 $2 \times 26 = 52$   
 $3 \times 26 = 78$   
 $4 \times 26 = 104$   
 $5 \times 26 = 130$   
 $6 \times 26 = 156$

### Missing Numbers

$$\begin{array}{r} 2\Box3 \\ 4 \overline{) 972} \end{array}$$

Fractions:  
adding with different  
denominators.

$$\frac{3}{10} + \frac{2}{5} \quad \left. \begin{array}{l} \text{find a} \\ \text{common} \\ \text{denominator} \\ \downarrow \\ \times 2 \end{array} \right\}$$

$$\frac{3}{10} + \frac{4}{10} = \frac{7}{10}$$

Fractions:  
subtracting with different  
denominators.

$$\frac{5}{9} - \frac{1}{3} \quad \left. \begin{array}{l} \text{find a} \\ \text{common} \\ \text{denominator} \\ \downarrow \\ \times 3 \end{array} \right\}$$

$$\frac{5}{9} - \frac{3}{9} = \frac{2}{9}$$

### Missing Numbers

$$\begin{array}{r} 48 \square \\ \times 27 \\ \hline 3374 \\ \hline 9640 \\ \hline 13014 \\ \hline \end{array}$$

### Multiplying Fractions

Fractions:  
multiplying fractions

$$\frac{2}{3} \times \frac{3}{4} = \frac{6}{12} (\div 6) \frac{1}{2}$$

Multiply numerators,  
multiply denominators  
then simplify if possible.

### Dividing Fractions

Fractions:  
divide fractions.

$$\frac{2}{3} \div \frac{1}{4}$$

Keep this fraction the same.  $\downarrow$   
Inverse the operation.  $\downarrow$   
Flip this fraction.  $\downarrow$

$$\frac{2}{3} \times \frac{4}{1} = \frac{8}{3}$$

$$\frac{8}{3} = 2 \frac{2}{3}$$

Fractions:  
divide a fraction  
by a whole number.

$$\frac{1}{2} \div 7$$

Make the whole number a fraction.  $\downarrow$

$$\frac{1}{2} \div \frac{7}{1}$$

(Keep) (Inverse) (Flip)

$$\frac{1}{2} \times \frac{1}{7} = \frac{1}{14}$$

Fractions:  
multiply fractions  
by whole numbers.

$\frac{2}{5} \times 8$  Multiply the  
whole number  
by the numerator.

$$\frac{2}{5} \times 8 = \frac{16}{5} = 3\frac{1}{5}$$