

Year 6 - Four Operations

Long Multiplication

Written Multiplication

$$\begin{array}{r}
 5,853 \\
 \times 23 \\
 \hline
 17,559 \\
 117,060 \\
 \hline
 134,619
 \end{array}$$

$5,853 \times 23 = 134,619$

Addition and Subtraction Written Methods

Written Addition

$$\begin{array}{r}
 45,853 \\
 + 23,463 \\
 \hline
 69,316
 \end{array}$$

Written Subtraction

$$\begin{array}{r}
 80,134 \\
 - 33,241 \\
 \hline
 46,893
 \end{array}$$



Partial Multiples for Long Division

$$216 \div 12 =$$

- (1) = 12
- (2) = 24
- (5) = 60
- (10) = 120
- (20) = 240
- (40) = 480
- (80) = 960
- (160) = 1920

Long Division

$$\begin{array}{r}
 216 \div 12 = 18 \\
 12 \overline{) 216} \\
 \underline{(10 \times 12) - 120} \\
 96 \\
 \underline{(5 \times 12) - 60} \\
 36 \\
 \underline{(3 \times 12) - 36} \\
 00
 \end{array}$$

How many $\times 12$ altogether?
 $10 + 5 + 3 = 18$

Vocabulary

Addition



add more plus
increase total
sum altogether

Subtraction



subtract minus
less take away
decrease leave
fewer difference

Multiplication



multiply lots of
times groups of
multiplied by array
repeated product
addition

Division



divide remainder
share share equally
groups of divided by
repeated each
subtraction

Short Division

$$\begin{array}{r}
 1 \\
 8 \overline{) 8,192} \\
 \underline{8} \\
 10 \\
 \underline{8} \\
 20 \\
 \underline{16} \\
 40 \\
 \underline{40} \\
 00
 \end{array}$$

How many 8s in 8?
 $8 \div 8 = 1$

How many 8s in 1?
 $1 \div 8 = 0 \text{ r}1$

How many 8s in 19?
 $19 \div 8 = 2 \text{ r}3$

How many 8s in 32?
 $32 \div 8 = 4$

