Formal written methods – four operations

Short multiplication

When multiplying by a 1-digit number, firstly make sure to align the place values correctly, then multiply the 1-digit number by each of the digits working from right (smallest place value) to left (largest place value).

```
    2  7  4  1
×             6
    1  6  4  4  6
          4  2
```

Addition	Subtraction	Multiplication	Division
Add	Subtract	Lots of	Divide
More	Minus	Times	Divided by
Plus	Leave	Multiply	Divided into
Make	Less	Groups of	Share
Sum	Take away	Product	Share equally
Total	Difference between	Multiplied by	Equal groups of
Altogether		Multiple of	
		Repeated addition	

Column addition

Ensure place values are lined up correctly and that you work from the right (the smallest place value) to the left (the biggest place value).

```
    5  6  2  1  7
+      3  9  5  8
    6  0  1  7  5
       1  1     1
```

Column subtraction

Ensure place values are lined up correctly and that you work from right to left, subtracting from the top each time.

```
   ³4  ¹3  ⁶7  ¹²3  ¹5
 -     9   1   8    6
   3   6   5   4    9
```

Long division

This method is the same as short division but expanded in order to clearly calculate the remainders for each part of the method.

$432 \div 15$ becomes

```
            2  8 . 8
   1  5 ) 4  3  2 . 0
          3  0
          1  3  2
          1  2  0
             1  2  0
             1  2  0
                   0
```

Answer: 28.8