Long division

This is the traditional way of doing long division, which you may have been taught at school.

Have a look at the calculation: **8,640 ÷ 15**

```
15 | 8  6  4  0
```

15 into 8 doesn't go, so look at the next digit.

```
          5
15 | 8  6  4  0
   - 7  5
     1  1
```

15 goes into 86 five times, so put a 5 above the 6.
15 x 5 = 75

Take that 75 away from the 86 to get your remainder.
86 – 75 = 11

```
          5  7
15 | 8  6  4  0
     7  5  ↓
     1  1  4
   - 1  0  5
              9
```

Next, carry the 4 down to make 114.

15 goes into 114 seven times, so put a 7 above the 4.
15 x 7 = 105

Take 105 from the 114 to get your remainder
114 – 105 = 9

```
          5  7  6
15 | 8  6  4  0
     7  5
     1  1  4
   - 1  0  5
              9  0
```

Carry the 0 down to make 90

15 goes into 90 exactly 6 times, so put a 6 above the 0

15 x 6 = 90

8,640 ÷ 15 = 576