

Dividing decimal numbers

The Division module has factsheets showing **different written division methods**. You may need to revise the method you use. Here are examples of division of a whole number by a single digit:

Example 1: there are 3724 boxes in a warehouse. They are packed in stacks of 7. How many stacks will there be?

$$3724 \div 7$$



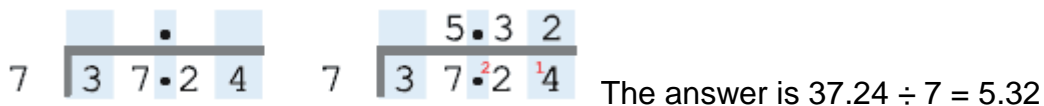
The small digits are the 'carrying digits'

Example 2: in a café, the bill comes to £37.24. This amount is shared equally between 7 people. How much will each person have to pay?

$$37.24 \div 7$$

To divide a number that includes a decimal fraction:

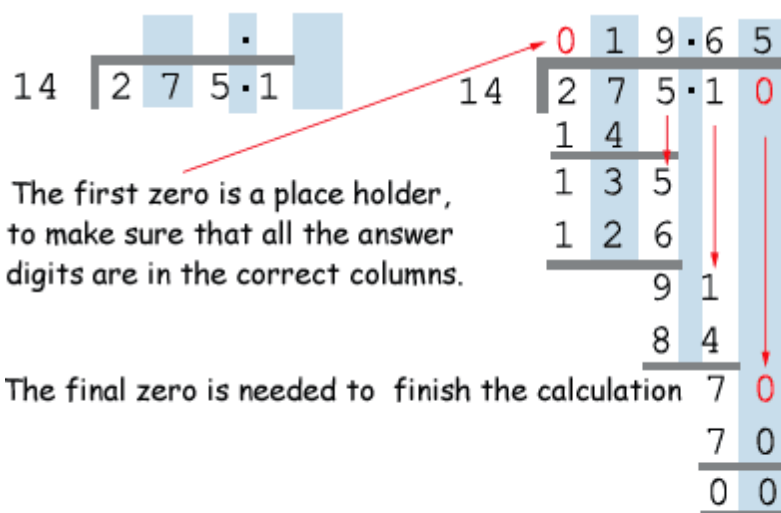
- put a decimal point on the answer line at the end of the units column
- carry out the division in the usual way



The answer is $37.24 \div 7 = 5.32$

The same applies to 'long division':

Example 3: $275.1 \div 14$



The first zero is a place holder, to make sure that all the answer digits are in the correct columns.

The final zero is needed to finish the calculation

$$275 \div 14 = 19.65$$

estimate and check your answer. $280 \div 14 = 20$, so it's about the right size.