

# Fast Five

1.  $6 \times 90 =$

2. 1278 divided by 100

3.  $\frac{5}{8}$  of 64

4.  $3672 - 984 =$

5.  $5567 + 6712 =$

# Fast Five Answers

1.  $6 \times 90 = 540$

2. 1278 divided by 100 = 12.78

3.  $\frac{5}{8}$  of 64 = 40

4.  $3672 - 984 = 2668$

5.  $5567 + 6712 = 12279$

Can I use long division?

## Recap

The process for short division helps us to understand long division.

First we will revisit short division, look at some examples and make sure that we understand the method.

**Have a go...**

$$224 \div 4 =$$

$$4 \overline{) 224}$$

First, we need to make sure that our calculation is laid out correctly.

$$\begin{array}{r} 0 \\ 4 \overline{) 224} \\ \underline{0} \phantom{0} \\ 22 \phantom{0} \\ \underline{20} \phantom{0} \\ 20 \phantom{0} \\ \underline{20} \phantom{0} \\ 0 \phantom{0} \end{array}$$

2 cannot be divided by 4 in a way that lets us solve this problem, so we're going to put a 0 above the 2 and add it to the 2 next to it, making 22.

$$\begin{array}{r} 05 \\ 4 \overline{) 22^2 4} \\ \underline{2} \phantom{2} \\ 2 \phantom{2} \\ \underline{2} \phantom{2} \\ 4 \end{array}$$

There are five fours in 22,  
with a remainder of 2,  
which we will attach to  
our 4, making 24



$$\begin{array}{r} 056 \\ 4 \overline{) 22^2 4} \end{array}$$

Now we have our final amounts, we can divide 24 by 4 to get 6, completing the calculation.

# Long division

When we are dividing by a two digit number, we use long division.

It is always best to write out a skeleton table first, being very careful that your answers are correct. Remember, if you can't do the multiplication in your head, you can use repeated addition.

Eg if the divisor was 31

I would write  $1 = 31$

$2 = 62$

$3 = 93$  and so on

Your turn

$$448 \div 14$$

$$14 \overline{) 448}$$

$$1 - 14$$

$$2 - 28$$

$$3 - 42$$

$$4 - 56$$

Lay out your calculation and include a skeleton table to the side. Remember, if you can't do the calculations mentally, you can use repeated addition.

Don't go too far into your skeleton table, 4 or 5 should be fine to start with.

$$\begin{array}{r} 0 \\ 14 \overline{) 448} \\ \underline{44} \phantom{8} \\ 0 \phantom{8} \end{array}$$

$$1 - 14$$

$$2 - 28$$

$$3 - 42$$

$$4 - 56$$

There isn't a way for us to divide 4 by 14, so we're going to put a 0 above the 4 and add it to the 4 next to it, making 44.

$$\begin{array}{r} 03 \\ 14 \overline{)448} \\ \underline{-42} \\ 02 \end{array}$$

$$1 - 14$$

$$2 - 28$$

$$3 - 42$$

$$4 - 56$$

Without going over 44, the highest multiple of 14 we can find is 42, which is  $14 \times 3$ .

We can put that 3 above our 4.

We now need to subtract 42 from 44 to find our remainder, which is 2.

$$\begin{array}{r}
 032 \\
 \hline
 14 \overline{) 448} \\
 \underline{42} \phantom{0} \\
 028
 \end{array}$$

$$1 - 14$$

$$2 - 28$$

$$3 - 42$$

$$4 - 56$$

Finally, we bring our 8 down to the 2, to make 28.

Then we divide 28 by 14 and find that we have an exact answer of 2, which we put above the 8 in the calculation.

Now we can see that  $448 \div 14 = 32$