

Choose which questions you want to practice below. Remember to do them mentally, practicing the mental maths method.

<u>Easier</u>	<u>Trickier</u>		
13.4 – 11.8	124.13 – 111.89		
14.2 – 11.4	104.66 – 89.93		

Fractions – Division

Dividing proper fractions by whole numbers

What is a half divided by 2?



A half divided by two is a quarter:





What is one half divided by six?

One half divided by six?

$\frac{1}{2} \div 6 = \frac{1}{12}$



What is a one half divided by five?



Back to the pie. Divide the half into five pieces:



One half divided by five is one tenth:



What is one half divided by three?



Quite easy to see?



Now lets look for the connections:



It seems that we could turn each into a **multiplication**:



We see that multiplication and division are closely connected.



 $\frac{-\times -}{2} = \frac{-}{6}$

 $\frac{1}{2} \times \frac{1}{6} = \frac{1}{12}$

 $\frac{1}{2} \times \frac{1}{5} = \frac{1}{10}$

Let's try a few more:

What is a third divided by three?

A third of a third:

 $\frac{1}{3} \div 3 = \frac{1}{9}$

What is a third divided by four?



A third divided by four is also a quarter of a third?



A quarter of a third is a twelfth.



Now lets add some new numerators:



$$\frac{2}{3} \div 4 = ?$$

Two thirds divided by four:



Last one:



$$\frac{3}{4} \div 5 = ?$$

Three quarters divided by five:

$$\frac{3}{4} \div 5 = ?$$

Three quarters divided by five:

And looking at our last four results:

Again, we could use multiplication:

1 1 1 1 1 1 $\frac{-\times -}{3} = \frac{-}{9}$ $\frac{-\times -}{3} = \frac{-}{12}$ $\frac{3}{4} \times \frac{1}{5} = \frac{3}{20}$ $\frac{2}{3} \times \frac{1}{4} = \frac{2}{12} = \frac{1}{6}$