

Short division

How do you do short division or the bus stop method?

Here's a step-by-step guide to the bus stop method:

$$362 \div 7 =$$

$$\begin{array}{r} 51 \text{ r}5 \\ 7 \overline{) 362} \end{array}$$

$$362 \div 7 = 51 \text{ r}5$$

- I start by thinking about whether 7 will go into 3.
- It doesn't, so I think about whether 7 will go into 36. It goes 5 times to make 35. I put the 5 over the 6.
- There is a remainder of 1, so this 1 goes next to the 2 to make 12.
- I know that 7 goes into 12 once and there is a remainder of 5, so I write 1 over the 2 and put 'R 5' at the end.

Long Division

<https://www.wikihow.com/Do-Long-Multiplication>

Multiplying a fraction by a fraction

Multiply the
numerators

$$\frac{2}{5} \times \frac{3}{4} = \frac{6}{20}$$

Multiply the
denominators

$$\frac{2}{5} \times \frac{3}{4} = \frac{6}{20}$$

Reduce the fraction if
necessary

$$\frac{6}{20} = \frac{3}{10}$$

Multiplying a fraction by a whole number

Example:

$$\frac{2}{3} \times 5$$

Make 5 into $\frac{5}{1}$:

$$\frac{2}{3} \times \frac{5}{1}$$

Now just go ahead as normal.

Multiply tops and bottoms:

$$\frac{2}{3} \times \frac{5}{1} = \frac{2 \times 5}{3 \times 1} = \frac{10}{3}$$

The fraction is already as simple as it can be.

$$\text{Answer} = \frac{10}{3}$$

Equivalent fractions, decimals and percentages

<https://www.mathsisfun.com/decimal-fraction-percentage.html>

Factors

What is a factor pair ? Definition and examples.

A **factor pair** is a pair of numbers that, when multiplied will result in a given product (or the same product).

For example, the factor pairs of 18 are shown below.

Factors pairs of 18	
$18 = 1 \times 18$	(1, 18)
$18 = 2 \times 9$	(2, 9)
$18 = 3 \times 6$	(3, 6)
$18 = -1 \times -18$	(-1, -18)
$18 = -2 \times -9$	(-2, -9)
$18 = -3 \times -6$	(-3, -6)