

Factorising an expression is really the opposite of expanding it, adding brackets instead of removing them.

Factorising involves looking for common factors.

Here's twelve X plus 18.

To add brackets or factorise: find the highest common factor of 12 and 18.

The factors of twelve are one, two, three, four, six and twelve.

The factors of eighteen are one, two, three, six, nine and eighteen.

So, the common factors are one, two, three and six.

Six is the largest number for both. So six is the highest common factor.

The highest common factor always goes outside the brackets

To find what goes inside the brackets, divide each term by the Highest Common Factor, in this case six.

Twelve x divided by six is two X and eighteen divided by six is three.

So twelve X plus 18 is the same as six, open brackets, two X plus three, close brackets.

Remember, to factorise an expression, always look for the Highest Common Factor