

3(5+7)=3 x 12=36

As we can see

 $3 \times 5 + 3 \times 7 = 3(5+7) = 36$

This is an example of the distributive property which can be used to find the product of a number and a sum or a difference.

a(b+c)=(b+c)a=ab+ac

a(b-c)=ab-ac=ba-ca=(b-c)a

The parts of the expression are called terms. A term could either be a number, a variable, or a product. If we have a term that contains both a number and a variable as in 2x the number part of the term, in this case 2, is called the coefficient. A term that only m Notesale.co.u contains a number and no variable part is called a constant term.

If we look at the expression:

5 + 3x - 2 + 7x

This expression has 4 terms who two of the terms re constant terms 5 and -2. the coefficient and 7. Terms like 3x and 7x that have The two other terms the same rank are cal sims. The constant terms are like terms as well.

Like terms can be combined as is stated in the distributive property

3x + 7x = (3 + 7)x = 10x

Expressions like 3x + 7x and 10x are equivalent expressions since they denote the same number.

An expression is written in its simplest form when it contains no like terms and no parentheses

Example

Simplify the expression

2(3p+5) - (p+2)

Notice that the second parenthesis is multiplied by -1. We can instead write the expression as