"Like Terms"

Like Terms

"Like terms" are **terms** whose variables (and their [exponents](http://www.mathsisfun.com/exponent.html) such as the 2 in x2) are the same.

In other words, terms that are "like" each other.

Note: the **coefficients** (the numbers you multiply by, such as "5" in 5x) can be different.

**Example:**

|  |  |  |
| --- | --- | --- |
| 7**x** | **x** | -2**x** |

Are all **like terms** because the variables are all **x**

**Example:**

|  |  |  |
| --- | --- | --- |
| (1/3)xy2 | -2xy2 | 6xy2 |

Are all **like terms** because the variables are all **xy2**

Unlike Terms

If they are not like terms, they are called "**Unlike Terms**":

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Unlike Terms | | | | Why they are "Unlike Terms" |
|  | -3xy | -3y | 12y2 | **←** these are all **unlike terms** (**xy**, **y** and **y2** are all different) |

Combining Like Terms

You can add **like terms** together to make one term:

**Example: 7x + x**

They are both **like terms**, so you can just add them:

7**x** + **x** = 8**x**

**Example: 3x2 - 7 + 4x3 - x2 + 2**

Some of the terms are **like terms**.

Combine **like terms**:

(3**x2** - **x2**) + (4**x3**) + (2 - 7)

Then add **like terms**:

2**x2** + 4**x3** - 5