

# ALGEBRAIC LANGUAGE

## MONOMIALS

**Monomials** are the simplest algebraic expressions. They are formed by the product of a number (called coefficient) and letters or variables with exponents (called the literal part).

**Like monomials** are those monomials which have the same literal part.



5. Match each monomial on the left column with its like monomial on the right:

- |                |             |
|----------------|-------------|
| 1) $x^2$       | a) $2x$     |
| 2) $17x$       | b) $-a^2b$  |
| 3) $1.3 a^2 b$ | c) $9xy^3$  |
| 4) $4ab$       | d) $x^3y$   |
| 5) $5xy^3$     | e) $1.3 ab$ |
| 6) $9x^3y$     | f) $17x^2$  |

Generally, the product signs are not included. We understand that  $2x$  means  $2 \cdot x$



6. Complete the table below:

	coefficient	variables	literal part
$4x^3y$	4	$x$ and $y$	$x^3y$
$1.2 x^4$			
$-3 a^5b^2$			
$xy^3z$			
7			

**Simplifying** means writing something more simply. You can only group together the expressions of the same type, that is, the like monomials.

For example, the expression  $x + x + x$  can be written more simply as  $3 \cdot x$  or  $3x$ .

7. Complete the following sentences:

The expression  $x + x + x + x$  can be written more simply as .....

The expression  $7x - x$  can be written more simply as .....

The expression  $2x^2 + 3x^2 + x^2$  can be written more simply as .....

The expression  $10y - 8y$  can be written more simply as .....

The expression  $ab + 5ab$  can be written more simply as .....

When the literal part is different, the addition is left indicated:  $x + 4x + 2y = 5x + 2y$

The expression  $4x + 3x^2 + x$  can be written more simply as .....

The expression  $a + 5a + b + 5b$  can be written more simply as .....

The expression  $7x + 3y - x + y$  can be written more simply as .....

The expression  $18n + 8 + 4m - 6n - 3$  can be written more simply as .....