Algebraic Terms

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$$4x^2 \quad \} \text{ term}$$

coefficient   variable
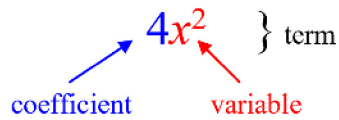
A **term** is made up of a **coefficient** and, in most cases, a **variable**.

A **polynomial** can be classified by the number of terms it has.

1 term:	monomial	ex: $3y$
2 terms:	binomial	ex: $b + 4a^2b$
3 terms:	trinomial	ex: $2x^2 + 3x - 1$

Identify the **coefficient** and the **variable** of each **term**.

Expression	Coefficient	Variable	Comments
$7x$	7	x	
$-4.9t^2$	-4.9	t	
$0.5bh$	0.5	b and h	
k^2	1	k	When no number is written in front of the variable, the coefficient is 1 or -1.
6	6	none	A term without a variable is called a constant.

Classify each **polynomial** by the number of terms it has.

Polynomial	Number of Terms	Type of Polynomial
$3x^2 + 2x$	2	binomial
$-2m$	1	monomial
$4x^2 - 3xy + y^2$	3	trinomial
$a - 2b + c - 3$	4	polynomial

The **degree of a term** is the sum of the exponents on the variables. State the degree of each term:

a) x^2 b) $3y^4$ c) $0.7u$ d) $-2a^2b$ e) $\frac{2}{3}xy$ f) -5

  2   4   1   3   2   0

The **degree of a polynomial** is the degree of the highest-degree term. State the degree of each polynomial.

a) $x + 3$ b) $5x^2 - 2x$ c) $3y^3 + 0.2y - 1$ d) $7x^2y^4 + x^6y$

  1   2   3   7

Assignment: p.179 #5, 9 – 12, 19, 23, 24, 26