



planetmath.org

Math for the people, by the people.

monic

Canonical name	Monic1
Date of creation	2013-03-22 12:18:42
Last modified on	2013-03-22 12:18:42
Owner	akrowne (2)
Last modified by	akrowne (2)
Numerical id	9
Author	akrowne (2)
Entry type	Definition
Classification	msc 12E10
Synonym	monic polynomial
Related topic	EisensteinCriterion
Related topic	IrreduciblePolynomial2
Related topic	AlgebraicInteger

A *monic polynomial* is a polynomial with a leading coefficient of 1. That is, if $P_n(x)$ is a polynomial of degree n in the variable x , then the coefficient of x^n in $P_n(x)$ is 1.

For example, $x^5 + 3x^3 - 10x^2 + 1$ is a monic 5th-degree polynomial. $3x^2 + 2z - 5$ is a 2nd-degree polynomial which is not monic.