

Polynomials

Degree	Equation	max. amount of roots	max. amount of extrema	max. amount of inflection points
0 constant	$f(x)=a$ e.g. $f(x)=3$	0	0	0
1 linear	$f(x)=ax+b$ e.g. $f(x)=2x+3$	1	0	0
2 quadratic	$f(x)=ax^2+bx+c$ e.g. $f(x)=2x^2-x+1$	2	1	0
3 cubic	$f(x)=ax^3+bx^2+cx+d$ e.g. $f(x)=4x^3-2x^2+x+22$	3	2	1
4	$f(x)=ax^4+bx^3+cx^2+dx+e$	4	3	2
5	$f(x)=ax^5+bx^4+cx^3+dx^2+ex+f$	5	4	3
6	$f(x)=ax^6+bx^5+cx^4+dx^3+ex^2+fx+g$	6	5	4