

Intro to Polynomials Vocabulary

Degree:

Term:

Standard Form:

Term	$4x^3$	$-3x$	6	x^2
Coefficient				
Power of x				

Number of Terms	Name by # of Terms	Degree	Name by Degree
1		0	
2		1	
3		2	
4 or More		3	
		4 or More	

Polynomial	Standard Form	Degree	Name by Degree	# Terms	Name by # Terms
$6x + x^4 - 2x^2 + 5$					
$x + 3$					
8					
$9x - 4x^3 + 6$					
$2 - 7x^2$					

Exercises

1-12: Fill in the table with the given polynomial's standard form, degree, name by degree and name by # of terms.

#	Polynomial	Standard Form	Degree	Name by Degree	Name by Number of Terms
1	$2x + x^3 - 8$				
2	$1 + 5x - 2x^2$				
3	$7x^2$				
4	$x^4 + 5 - 2x^2$				
5	11				
6	$5x + 2x^3 + 6$				
7	$x^5 + 5x + x^2 - 4 + x^3$				
8	$x - 2$				
9	$9 + x$				
10	$x^2 - x^3 + 3$				
11	$-x^2$				
12	-9				

Intro to Polynomials Vocabulary – Answers

Degree: highest power/
largest exponent

Term: coefficient times a variable to
a power

$-2x^5$
 (Arrows point from the text to the coefficient -2, the variable x, and the power 5)

Standard Form: terms in decreasing powers of x

$$3x^5 + 2x^2 - x + 8$$

Term	$4x^3$	$-3x$	6	x^2
Coefficient	4	-3	6	1
Power of x	3	1	0	2

Number of Terms	Name by # of Terms	Degree	Name by Degree
1	Monomial	0	Constant
2	Binomial	1	Linear
3	Trinomial	2	Quadratic
4 or More	Polynomial	3	Cubic
		4 or More	4 th , 5 th , ... (Ordinal)

Tip: Be ready to answer “why does quadratic mean power of 2 when quad means 4?”

Think of squares. Four sides. However, area of a square is represented by x^2

Polynomial	Standard Form	Degree	Name by Degree	# Terms	Name by # Terms
$6x + x^4 - 2x^2 + 5$	$x^4 - 2x^2 + 6x + 5$	4	4 th Degree	4	Polynomial
$x + 3$	$x + 3$	1	Linear	2	Binomial
8	8	0	Constant	1	Monomial
$9x - 4x^3 + 6$	$-4x^3 + 9x + 6$	3	Cubic	3	Trinomial
$2 - 7x^2$	$-7x^2 + 2$	2	Quadratic	2	Binomial

Exercises

1-12: Fill in the table with the given polynomial's standard form, degree, name by degree and name by # of terms.

#	Polynomial	Standard Form	Degree	Name by Degree	Name by Number of Terms
1	$2x + x^3 - 8$	$x^3 + 2x - 8$	3	Cubic	Trinomial
2	$1 - 2x^2$	$-2x^2 + 1$	2	Quadratic	Binomial
3	$7x^2$	$7x^2$	2	Quadratic	Monomial
4	$x^4 + 5 - 2x^2$	$x^4 - 2x^2 + 5$	4	4 th Degree	Trinomial
5	11	11	0	Constant	Monomial
6	$5x + 2x^3 + 6$	$2x^3 + 5x + 6$	3	Cubic	Trinomial
7	$x^5 + 5x + x^2 - 4 + x^3$	$x^5 + x^3 + x^2 + 5x - 4$	5	5 th Degree	Polynomial
8	$x - 2$	$x - 2$	1	Linear	Binomial
9	$9 + x$	$x + 9$	1	Linear	Binomial
10	$x^2 - x^3 + 3$	$-x^3 + x^2 + 3$	3	Cubic	Trinomial
11	$-x^2$	$-x^2$	2	Quadratic	Monomial
12	-9	-9	0	Constant	Monomial