Intro to Polynomials Vocabulary

Degree: Term: Standard Form:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Term |  |  |  |  |
| 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 |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |

**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 |  |  |  |  |  |
| 2 |  |  |  |  |  |
| 3 |  |  |  |  |  |
| 4 |  |  |  |  |  |
| 5 |  |  |  |  |  |
| 6 |  |  |  |  |  |
| 7 |  |  |  |  |  |
| 8 |  |  |  |  |  |
| 9 |  |  |  |  |  |
| 10 |  |  |  |  |  |
| 11 |  |  |  |  |  |
| 12 |  |  |  |  |  |

Intro to Polynomials Vocabulary – Answers

Degree: highest power/ Term: coefficient times a variable to Standard Form: terms in decreasing powers of x

-2 x 5

largest exponent a power

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Term |  |  |  |  |
| 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  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 x2 |
| 2 | Binomial | 1 | Linear |
| 3 | Trinomial | 2 | Quadratic |
| 4 or More | Polynomial | 3 | Cubic |
|  |  | 4 or More | 4th, 5th, … (Ordinal) |

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