Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Period \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date \_\_\_\_\_\_\_\_\_\_

Classifying Polynomials

Polynomials can be classified (named) by the **number of terms.**

|  |  |  |
| --- | --- | --- |
| **Polynomial** | **Number of Terms** | **Name** |
|  | 1 term | *Monomial* |
|  | 2 terms | *Binomial* |
|  | 3 terms | *Trinomial* |

Polynomials can also be classified by the **degree** (largest exponent of the variable)

|  |  |  |
| --- | --- | --- |
| **Polynomial** | **Degree** | **Name** |
|  |  |  |
| -24 | 0 degree ( no power of x) | *Constant* |
| 2x-8 | 1st degree (x to the power of 1 | *Linear* |
|  | 2nd degree () | *Quadratic* |
|  | 3rd degree () | *Cubic* |

**Directions: Complete the table below.**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **Polynomial** | **Standard Form** | **Degree** | **Number of Terms** | **Name** |
| 1. |  |  | 2 | 3 | Quadratic trinomial |
| 2. |  |  |  |  |  |
| 3. | -4 |  |  |  |  |
| 4. |  |  |  |  |  |
| 5. |  |  |  |  |  |

**Directions: Add** the polynomials. Write the answer in standard form.

6. 7.

Directions: **Subtract** the polynomials. Write the answer in standard form.

8. 9.

Add or Subtract each polynomial.

10. 11.

12. 13.

14. 15.

16. 17.

18. 19.