

Name: \_\_\_\_\_



# Naming Polynomials

**Directions:** Identify whether or not each of the following is a polynomial. If the expression is a polynomial, state whether it is linear, quadratic, or cubic and state its name based on the number of terms.

1.)  $8x$

7.)  $12x^3 - 3x^2$

2.)  $-3x^2$

8.)  $-6 - 2x^2 + 3x$

3.)  $\frac{3}{x}$

9.)  $6x^{-3} - 9$

4.)  $13 + 9x$

10.)  $-4x^2 + 11$

5.)  $2x^3 - 4x^2 + 9x$

11.)  $-x^2 + 5x - 1$

6.)  $-6x^2$

12.)  $8 - 5x^2 + 3x^3$

## ANSWER KEY

1.)  $8x$   
**linear monomial**

7.)  $12x^3 - 3x^2$   
**cubic binomial**

2.)  $-3x^2$   
**quadratic monomial**

8.)  $-6 - 2x^2 + 3x$   
**quadratic trinomial**

3.)  $\frac{3}{x}$  **not a polynomial**

9.)  $6x^{-3} - 9$   
**not a polynomial**

4.)  $13 + 9x$   
**linear binomial**

10.)  $-4x^2 + 11$   
**quadratic binomial**

5.)  $2x^3 - 4x^2 + 9x$   
**cubic trinomial**

11.)  $-x^2 + 5x - 1$   
**quadratic trinomial**

6.)  $-6x^2$   
**quadratic monomial**

12.)  $8 - 5x^2 + 3x^3$   
**cubic trinomial**