

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.) $4x + 4$

7.) $96x^3$

2.) $x^2 - 9$

8.) $22x^3 - 21x^2$

3.) $10x^{-2} - 5x$

9.) $\frac{5}{x^2 - 16}$

4.) $4x^2 - x + 6$

10.) $18 + (-3x^2)$

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

11.) $40 - 8x^3 + 32x^2$

6.) $-24x^2$

12.) $5x - x^2 - 1$

ANSWER KEY

1.) $4x + 4$ **linear binomial**

7.) $96x^3$
cubic trinomial

2.) $x^2 - 9$ **quadratic binomial**

8.) $22x^3 - 21x^2$
cubic binomial

3.) $10x^{-2} - 5x$ **not a polynomial**

9.) $\frac{5}{x^2-16}$ **not a polynomial**

4.) $4x^2 - x + 6$ **quadratic trinomial**

10.) $18 + (-3x^2)$
quadratic binomial

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

11.) $40 - 8x^3 + 32x^2$
cubic trinomial

6.) $-24x^2$
quadratic monomial

12.) $5x - x^2 - 1$
quadratic trinomial