

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

Quiz 6.1-6.4 Review Worksheet Answers

Name the following polynomials by number of terms (monomial, binomial, trinomial, polynomial) and degree (constant, linear, quadratic, cubic, quartic, quintic), list the leading coefficient, and write the polynomial in standard form:

$-10x^5$   
monomial  
deg.: 5, quintic  
lead. coeff.: -10  
is in std. form

$4x - 9x^2 + 4x^3 - 5x^4$   
4 term polynomial  
deg.: 4, quartic  
lead. coeff.: -5  
std. form:  $-5x^4 + 4x^3 - 9x^2 + 4x$

$10 + 8x$   
binomial  
deg.: 1, linear  
lead. coeff.: 8  
std. form:  $8x + 10$

$-4 - 2a^2 + 8a$   
trinomial  
deg.: 2, quadratic  
lead. coeff.: -2  
std. form:  $-2a^2 + 8a - 4$

$4b^6 + 5b^5 + b^4$   
trinomial  
deg.: 6  
lead. coeff.: 4  
is in std. form

$-1$   
monomial  
deg.: 0, constant  
lead. coeff.: -1  
is in std. form

Add or subtract the following polynomials, as indicated:

$$(-4k^4 + 14 + 3k^2) + (-3k^4 - 14k^2 - 8)$$

$$(3 - 6n^5 - 8n^4) - (-6n^4 + n^3 - 3n - 8n^5)$$

$$-7k^4 - 11k^2 + 6$$

$$2n^5 - 2n^4 - n^3 + 3n + 3$$

Write the polynomials:

$$12x^2 - 7x + 8$$

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