

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

Show work needed to justify your answer.

Date: \_\_\_\_\_

HW # 56: Algebra 1 - Standard 36 - Add &amp; Subtract Polynomials

5 points

Determine whether each expression is a polynomial. If it is a polynomial, find the degree and determine whether it is a *monomial*, *binomial*, or *trinomial*.

1.  $\frac{5y^3}{x^2} + 4x$

NOT a polynomial  
Positive exponent  
in denominator.

3.  $c^4 - 2c^2 + 1$

Polynomial  
Degree = 4  
Trinomial.

5.  $a - a^2$

Polynomial  
Degree 2  
Binomial

6.  $5n^3 + nq^3$

Polynomial  
Degree: 4  
Binomial

Write each polynomial in standard form. Identify the leading coefficient.

7.  $5x^2 - 2 + 3x$

$5x^2 + 3x - 2$

L.C.  $\rightarrow$   $\boxed{5}$

8.  $8y + 7y^3$

$7y^3 + 8y$

L.C.  $\rightarrow$   $\boxed{7}$

9.  $4 - 3c - 5c^2$

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

L.C.  $\rightarrow$   $\boxed{-5}$

10.  $-y^3 + 3y - 3y^2 + 2$

$-y^3 - 3y^2 + 3y + 2$

L.C.  $\rightarrow$   $\boxed{-1}$

11.  $11t + 2t^2 - 3 + t^5$

$t^5 + 2t^2 + 11t - 3$

L.C.  $\rightarrow$   $\boxed{1}$

13.  $\frac{1}{2}x - 3x^4 + 7$

$-3x^4 + \frac{1}{2}x + 7$

L.C.  $\rightarrow$   $\boxed{-3}$