

Name: _____

Date:

Course: _____

Nyack College

College Algebra

Preliminary Assessment #3

Directions: Provide complete responses to each question. Make sure to show your work.

1. Complete the following table in which all coefficients and degree of each polynomial must be identified:

Polynomial	Coefficients	Degree
0	a.	b.
15	c.	d.
$12x - 5$	e.	f.
$x^3 + x^2 - 2x + 1$	g.	h.
$2x^4 + 7x^2 - 3x$	i.	j.

Name: _____

Date:

Course: _____

Nyack College

2. Find the sum of the following polynomials:

a. $x^3 + x^2 - 2x + 1$
 $4x^3 + 2x^2 - x + 1$

b. $x^2 - 2x + 1$
 $2x^2 - x + 1$

c. $x^5 + x^3 - 6x$
 $x^4 + 2x^3 - 3x + 4$

d. $x^5 + x^3 - 2x + 1$
 $-3x^5 + 2x^3 - x + 1$

Name: _____

Date:

Course: _____

Nyack College

3. Find the difference of the following polynomials:

a. $x^3 + x^2 - 2x + 1$
 $4x^3 + 2x^2 - x + 1$

b. $x^2 - 2x + 1$
 $2x^2 - x + 1$

Name: _____

Date:

Course: _____

Nyack College

c. $x^5 + x^3 - 6x$
 $x^4 + 2x^3 - 3x + 4$

d. $x^5 + x^3 - 2x + 1$
 $-3x^5 + 2x^3 - x + 1$

Name: _____

Date:

Course: _____

Nyack College

4. Find the product of the following polynomials:

a. $x^3 + x^2 - 2x + 1$
 $4x^3 + 2x^2 - x + 1$

b. $x^2 - 2x + 1$
 $2x^2 - x + 1$

Name: _____

Date:

Course: _____

Nyack College

c. $x^5 + x^3 - 6x$
 $x^4 + 2x^3 - 3x + 4$

d. $x^5 + x^3 - 2x + 1$
 $-3x^5 + 2x^3 - x + 1$