Name: _____ Date: _____ Period: _____

4.2 Adding Subtracting & Multiplying Polynomial Functions CYU

☑ *Use when you get it right all by yourself*

S *Use when you did it all by yourself, but made a silly mistake*

H *Use when you could do it alone with a little help from teacher or peer*

G *Use when you completed the problem in a group*

X *Use when a question was attempted but wrong (get help)*

N *Use when a question was not even attempted*

CONCEPTS	BASIC	INTERMEDIATE	ADVANCED
Adding Polynomials	1, 2		
Subtracting Polynomials	3, 4		
Multiplying Polynomials	5, 6	7 - 8	13
Pascal's Triangle		9 - 11	12 - 13

Find the sum. Show all work for full credit.

1. $(12x^5 - 3x^4 + 2x - 5) + (8x^4 - 3x^3 + 4x + 1)$

2. $(9x^4 - 3x^3 + 4x^2 + 5x + 7) + (11x^4 - 4x^2 - 11x - 9)$

Find the difference. Show all work for full credit.

3. $(5x^6 - 2x^4 + 9x^3 + 2x - 4) - (7x^5 - 8x^4 + 2x - 11)$

4. $(4x^5 - 7x^3 - 9x^2 + 18) - (14x^5 - 8x^4 + 11x^2 + x)$

Find the product. Show all work for full credit.

5. $(5x^2 - 4x + 6)(-2x + 3)$

6. $(3x^2 + x - 2)(-4x^2 - 2x - 1)$

7. $(3c - 5)^2$

8. $(9g - 4)^2$

Use Pascal's Triangle to expand the binomial. Show all work for full credit.

9. $(2z + 4)^3$

10. $(2q - 3)^4$

11. $(g + 2)^5$

12. $(np - 1)^4$

13. **COMPARING METHODS** Find the product of the expression $(a^2 + 4b^2)^2(3a^2 - b^2)^2$ using two different methods. Which method do you prefer? Explain.

CYU Reflection: *How far can you go: basic, intermediate, or advanced?*

Rate your mastery level!

How confident are you with the skills this CYU covered? Circle the score you would give yourself.