Advanced Algebra 4 Name:\_\_\_\_\_\_\_\_\_\_\_\_

Polynomials and Polynumerals

**Adding:**

1. $23+345=$
2. $1253+386=$

1. 1050203+7213
2. How do you add multi-digit numbers? Explain the steps thoroughly.

1. $(2x+3)+(3x^{2}+4x+5)=$

1. $(1x^{3}+2x^{2}+5x+3)+(3x^{2}+8x+6)=$

1. ($x^{6}+5x^{4}+2x^{2}+3)+(7x^{3}+2x^{2}+x+3)=$

1. How do you add multi-term polynomials? Explain the steps thoroughly.

**Subtracting:**

9. $754-23=$

10.$1234-111=$

11. ($7x^{2}+5x+4)-(2x+3)=$

12. $(x^{4}+2x^{3}+3x+4)-(x^{2}+x+1)=$

13. How are adding and subtracting similar? How are they different?

**Multiplying: Use an area model to help.**

14. $(23)(35)=$

15. $(1356)(11)=$

16. $(2x+3)(3x+5)=$

17. ($x^{3}+3x^{2}+5x+6)(x+1)=$

18. How do you multiply multi-digit numbers? How do you multiply multi-term polynomials?

**Extra Practice:**

19. $(6x^{3}+2x^{2}-3x+5)(x^{2}-3x-2)=$

20. $(x^{4}+x^{2}+1)(x-1)=$

21. ($x^{4}+2x^{3}+4x^{2}+8x+16)(x-2)=$