Algebra II Classwork/Homework Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Operations with Polynomials and Classifying Polynomials Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_



Examples of polynomial multiplication:

Example 1:



Example 2:



Classwork/homework: Perform the following operations. Classify the resultant polynomial by degree and number of terms.

13. (8x2 + 1) + (3x2 – 2)

15. (x2 – 6x + 5) – (x2 + x – 2)

23. (10x3 – 4x2 + 3x) – (x3 – x2 + 1)

24. (50x – 3) + (8x3 + 7x2 + x + 4)

27. x(x2 + 6x – 7)

28. 10x2(x – 5)

33. (x + 3) (x2 – 4x + 9)

34. (x + 8)(x2 – 7x – 3)

43. (x2 + x + 4)(2x2 – x + 1)

44. (x2 – x – 3)(x2 + 4x + 2)

45. (x + 9)(x – 2)(x – 7)

46. (x + 3)(x – 4)(x – 5)