NAME:

DATE:

**Subtracting Polynomials**



1. In your own words, how do we subtract polynomials?



1. What have you learned previously that can help you with this?



1. Using alge-tiles, an online version of alge-tiles, or any other representation you are comfortable with:



* 1. Create the representation for each of the expressions



* 1. Create the representation for adding the opposite
  2. Simplify the expression (“subtract” the polynomials)
  3. State the answer
     1. 3x - 4x



* + 1. 2x - 3y



* + 1. (2x + 3) - (x - 2)



* + 1. (x2 – 4x – 1) - (x2 – x – 1)



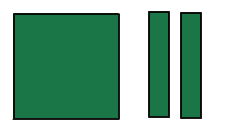
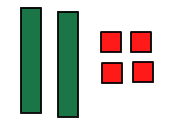
* + 1. (xy + 2y2) - (-xy + 2y2)



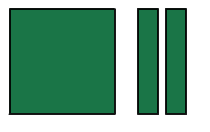
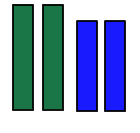
* + 1. (x2 + x + 3) + (x + 4) - (-2x2 – x – 6)



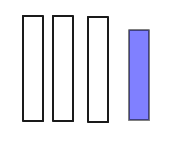
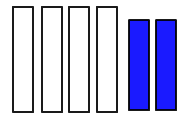
1. For the following, write down the subtraction expression, as well as the simplified expression. If you need to, represent adding the opposite.

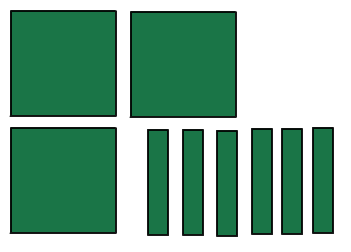
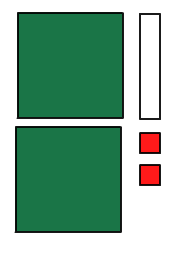


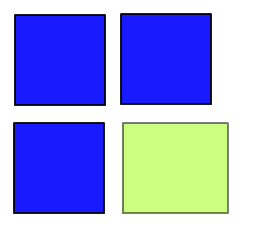
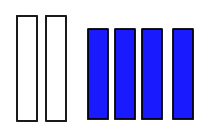


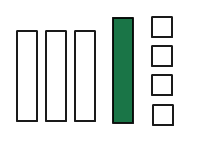
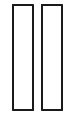
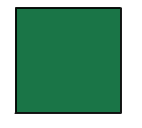








1. Subtract the following polynomial expressions.
   1. 3x - 4x



* 1. 4y + 3x + 3xy - 2y - 2x



* 1. 2x2 - (-4x2 – 2x)



* 1. (5p3 + 4p2) - (4p3 + 5p2)



* 1. (-4m – 8) - (-4m – 8)



* 1. (-4m – 8) - (4m + 8)



* 1. (2x4 + 3x2 – 8) - (5x3 – 9x + 5)



1. Write your own subtraction of the following. Be sure to include a simplified answer! Challenge your classmates to simplify your polynomials.
   1. A monomial minus a monomial



* 1. A trinomial minus a binomial



* 1. A polynomial with degree 4 minus a polynomial with degree 3.

1. Work backward (think Jeopardy!). Write an expression of subtraction of polynomials for each of the following simplified answers.



* 1. –x



* 1. 5xy



* 1. –y2 + 3



* 1. x2 + 2x – 7
  2. -3x4 – 8x – y – 3