

Review: factorization (continued)

Mr. Neeman. 10A, August 2, 2011

Homework on factorization and completing the square

Note: There are no special practice problems for this homework, but see the exercises on the previous handout.

Important: make sure to check your answers by carefully multiplying everything back out and seeing whether what you get matches what you started with. This is not required, but it would enable you to catch any and all mistakes and is highly recommended.

Complete the square for each of the following. Afterwards, factorize the result if possible.

#H1. $4x - x^2 + 3$

#H2. $3x^2 + 12x + 4$

#H3. $x^2 + 7x + 14$

#H4. $\frac{1}{2}x^2 + 3x - 5$

#H5. $5 - x - 2x^2$

Factorize each of the following as far as possible, using the methods of your choice. Remember that completing the square is good as a method of last resort.

#H6. $6x^2 - 5x - 1$

#H7. $x^3 + 64$

#H8. $x^2 - 9x + 20$

#H9. $x^2 - 4x + 2$

#H10. $\frac{1}{2}x^2 + 4x - \frac{9}{2}$