

Homework for Aug. 16th
Mr. Neeman. 10A, August 13, 2011

Polynomial equations: solve each of the following.

#H1. $x^3 + 2x^2 + 5x + 10 = 0$

#H2. $x^3 - x^2 - 6x = 0$

#H3. $x^4 + 6x^3 + 7x^2 + 12x + 10 = 0$

#H4. $x^3 + 8x^2 + 20x + 16 = 0$

Radical equations: solve each of the following.

#H5. $\sqrt{5x+10} - \sqrt{3x+7} = 1$

#H6. $x - \sqrt[3]{2x^2 + 2x} = -1$

#H7. $x = \sqrt{7x+3} - x^3 - 2$

Algebraic fractions (preparation for fractional equations on Tuesday).

Calculate the following sums of fractions (by first establishing a common denominator).
Leave the denominator in its factorized form, but multiply out and simplify everything in
the numerator (and, optionally, then factorize if you see how to).

#H8. $\frac{2x+1}{3x-1} - \frac{x-1}{x+1}$

#H9. $\frac{2-x}{x-4} + \frac{3x-2}{x+1}$

#H10. $\frac{1}{x+3} - \frac{x+2}{x^2+1}$