Math 103 – Intermediate Algebra
Test 2 Review Sheet
Winter 2023
Test 2 covers Sections 4.2 - 4.4, Sections 5.1 - 5.3, Chapter 6, and Sections 7.1 - 7.2

Expressions
Exponential Expressions
  ☐ Be able to simplify an expression using the properties of exponents. (Section 5.2)
     (For a summary on the properties of exponents refer to page 522.)
Polynomials
  ☐ Know how to write a polynomial in standard form. (Section 5.1)
  ☐ Know how to find the degree of a polynomial. (Section 5.1)
  ☐ Be able to add and subtract polynomials. (Section 5.1)
  ☐ Be able to multiply polynomials. (Section 5.3)
  ☐ Know how to factor polynomials. (Sections 6.1-6.4)
     (For a general strategy on factoring polynomials refer to page 617.)
  ☐ Know when a polynomial in prime with respect to the integers. (Sections 6.1-6.4)
Rational Expressions
  ☐ Be able to determine the values for which a rational function is undefined. (Section 7.1)
  ☐ Know how to simplify a rational expression. (Section 7.1)
  ☐ Be able to multiply and divide rational expressions. (Section 7.1)
  ☐ Be able to add and subtract rational expressions. (Section 7.2)

Equations
Polynomial Equations
  ☐ Be able to solve a polynomial equation by factoring. (Section 6.5)

Systems of Equations
  ☐ Be able to solve a system of linear equations in three variables. (Section 4.4)
  ☐ Know when a system of equations has no solution or has infinitely many solutions. (Sections 4.4)

Applications
  ☐ Be able to translate an application to system of equations and solve. (Sections 4.2-4.4)
  ☐ Be able to solve applications involving evaluating a polynomial function. (Section 5.1)
  ☐ Be able to solve applications modeled by quadratic equations. (Section 6.5)

Review Problems
Chapter 4 Review (pg 486): 349, 351, 357, 359, 361, 363, 365, 371, 373, 375

Chapter 5 Review (pg 567): 347, 351, 355, 359, 363, 367, 371, 375, 381, 385, 387, 391, 393, 397, 399, 403, 407, 409, 411, 413, 415, 417, 419, 431, 433, 435, 437, 443, 445, 453, 457, 459, 461

Chapter 6 Review (pg 648): 337, 341, 345, 351, 353, 355, 357, 359, 361, 363, 365, 367, 369, 371, 383, 385, 387, 389, 393, 395, 397, 399, 401, 403, 405, 407, 409, 411, 413, 415, 417, 419, 421, 423, 427, 429, 431, 433, 435, 443

Chapter 7 Review (pg 748): 377, 383, 387, 389, 391, 401, 405, 407, 409, 411, 413, 415, 417, 419, 421