MA 102 CAPA Homework Assignment by Section – CAPA ma102 Notes 2

(2002.12)

1. The CAPA ma102 homework system consists of 40 problem sets. Each problem set contains usually 10 – 15 problems.

2. The problems which will appear in the Final Exam are covered by the CAPA ma102 homework problems.

3 All the CAPA ma102 problem sets will be open throughout the Spring Semester (January 6- May 5 – the Final Exam day). But the "preferred" deadline will be set for each problem (see "Class schedule and grading policy" for your class).

4. The students are encouraged to do more problems in EXERCISES of each section of the textbook after finishing this minimum requirement.

Chapter 2

§2.4. Absolute-Value Equations and Inequalities

Set 1 (Introduction to CAPA).

Set 2 (Equations and inequalities involving absolute values).

Chapter 3

§3.1. The Rectangular Coordinate System and Graphing Straight Lines

§3.2. Graphs and Equations

Set 3 (Points on a graph)

Set 4 (Finding the missing component of the ordered pairs for the equation)

Set 5 (Finding the x-intercept and y-intercept of a line)

§3.3. Relation and Functions: Basic Concepts

§3.4. Function Notation

Set 6 (Function notation)

§3.5. Interpreting Graphs 1, 3.

Chapter 4

§4.1. Straight Lines and Slope

Set 7 (Slope of lines)

§4.2. Equations of a line and Linear Functions as Mathematical Models

Set 8 (Equation of a line).

Set 9 (Word problems using linear equations).

§4.3. Linear Systems in Two Variables

Set 10 (System of equations).

Set 11 (Word problems using system of linear equations).

Chapter 5

§5.1. Polynomial Functions as Mathematical Models

§5.2. Polynomials: Sums, Differences, and Products

Set 12 (Operations of polynomials (I))

Set 13 (Operations of polynomials (II))

§5.3. General Forms and Special Products

Set 14 (General forms, special products and their applications).

§5.4. Factoring Out the Greatest Common Factor

Set 15 (Factoring by finding the greatest common factor).

§5.5. Factoring Trinomials

Set 16 (Factoring trinomials)

§5.6. Solving Polynomial Equations by Factoring

Set 17 (Solving quadratic equations by factoring)

Set 18 (Solving word problems using factoring)

§5.7. Polynomial Division

Set 19 (Dividing polynomials)

Chapter 6

§6.1. Rational Function

§6.2. Equivalent Fractions

Set 20 (Reducing rational expressions to lowest terms).

§6.3. Multiplication and Division of Rational Expression

Set 21 (Multiplication and division of rational expressions).

§6.4. Sums and Differences of Radical Expressions

Set 22 (Addition and subtraction of rational expressions).

§6.5 Mixed Operations and Complex Fractions

Set 23 (Mixed Operations and Complex Fractions)

§6.6 Fractional Equations and Inequalities

Set 24 (Rational equations).

§6.7 Literal Equations

Set 25 (Literal Equations)

§6.8. Rational Functions and Equations as Mathematical Models

Set 26 (Word problems on work and time)

Set 27 (Word problems on distance and speed)

Set 28 (Word problems on percentage)

Chapter 7

§7.1. Natural Number and Integral Exponents

Set 29 (Computation of positive integer exponents).

Set 30 (Computation of integer exponents).

§7.3. Rational Exponents and Radical Notation

Set 31 (Computation of fractional exponents)

§7.4. Multiplying Radical Exponents

Set 32 (Simplifying radical expressions)

§7.5. Adding and Subtracting Radical Exponents

Set 33 (Addition and subtraction of radical expressions)

§7.6. Multiplying and Dividing Radical Exponents

Set 34 (Multiplication and division of radical expressions).

§7.7. Radical Functions and Equations

Set 35 (Radical equations)

§7.8. Complex Numbers

Set 36 (Computation of complex numbers).

Chapter 8

§8.1. Quadratic Functions as mathematical Models

§8.2. Solving Quadratic Equations: The Factoring and Square Root Method

Set 37 (The square root method and the Pythagorean theorem).

§8.3. Solving Quadratic Equations: Completing the Square

Set 38 (The completing square method.)

§8.4. Solving Quadratic Equations: The Quadratic Formula

Set 39 (The quadratic formula)

Set 40 (Word problems related to quadratic equation)