

Math 120 Theme 2 Schedule and Objectives

Theme 2: Financial and Practical Numeracy

Project 2: Home Ownership

Recall: View the videos and read the applicable sections BEFORE the first class of the week, and complete both the RC (Reading Checks) and HW (HomeWork) before your assigned due dates.

Week 6

Unit 2A Objectives: Identify standardized units, convert between units

Reading: Unit 2A

RC 2A: 2 random from 1-10

HW 2A: (Exercises) 7, 8, 9, 10, 11, 12, 13-BR, 14-BR, 15-BR, 16-BR, 17-BR, 18-BR, 21, 22, 25, 26, 27, 29, 45, 47, 49, 51, 58, 59, 61, 63, 65

HW Topics: Decide if a statement involving units makes sense (6); Evaluate expressions that contain fractions (2); Write decimals as common fractions (2); Convert fractions to decimals (2); Describe the steps to apply the Understand-Solve-Explain process (2); Determine appropriate units & perform unit conversions (14)

Unit 2B Objectives: Develop experience with unit analysis as a problem solving technique

Reading: Unit 2B

RC 2B: 2 random from 1-10

HW 2B: (Exercises) 7, 8, 9, 13-BR, 14-BR, 21, 24, 25, 37, 38, 39, 51, 53, 55, 57

HW Topics: Decide if a statement involving working with units makes sense (3); Compute powers of 10 (2); Solve application problems involving unit analysis (2); Interpret metric prefixes (1); Convert units (3); Solve application problems involving unit analysis (4)

Unit 2C Objectives: Use the four step problem solving process and 8 provided hints to solve problems

Reading: Unit 2C

RC 2B: 2 random from 1-10

HW 2C: None

Mini Project 2: Converting Grandma's Cookie Recipe

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Week 7

Unit 3A Objectives: Use percentages to compare and answer questions.

Reading: Unit 3A

RC 3A: 2 random from Quick Quiz 1-10

HW 3A: (Exercises) 10, 13, 14, 15-BR, 17-BR, 19-BR, 38, 41, 42, 43, 45, 48, 49, 51, 57, 59, 62, 63, 67, 70

HW Topics: Decide if a statement involving percentages makes sense (3); Convert between fractions, decimals, & percentages (3); Express fractions as percentages (4); Find percent change (4); Solve percentage problems (6)

Unit 3C Objectives: Identify significant digits, properly round, find relative error.

Reading: Unit 3C

RC 3C: 2 random from Quick Quiz 1-10

HW 3C: (Exercises) 43, 45, 46, 47, 48, 49, 51, 53

HW Topics: Describe sources of error & determine absolute & relative error (6); Determine which measurements are more accurate & which are more precise (2)

Mini Project 3: Calculating Grades and GPA in a Course

Weeks 8 and 9

Unit 4A Objectives: Budget, Manage Expenses

Reading: Unit 4A

RC 4A: 2 random from Quick Quiz 1-10

HW 4A: (Exercises) 8, 9, 13, 15, 16, 17, 19, 21, 22, 23, 24, 31, 32, 33, 36, 37, 38, 40

HW Topics: Decide if a statement involving expenses makes sense (2); Calculate & interpret percentage of spending (9); Calculate interest payments (4); Calculate net cash flow (3)

Unit 4B Objectives: Calculate simple and compound interest, Comparing APR and APY

Reading: Unit 4B

RC 4B: 2 random from Quick Quiz 1-10

HW 4B: (Exercises) 52, 54, 56, 60, 64, 69, 82, 88

HW Topics: Calculate using simple & compound interest (6); Find the present value, compare yields, & find time periods (2)

Unit 4C Objectives: Using savings for future use, and recognizing types of investments

Reading: Unit 4C (up through Example 7, pay particular attention to Example 4)

RC 4C: 2 random from Quick Quiz 1-10

HW 4C: None

Unit 4D Objectives: Calculating Loans and Mortgages, Understanding Credit Card Bills

Reading: Unit 4D

RC 4D: 2 random from Quick Quiz 1-10

HW 4D: (Exercises) 1, 2, 3, 5, 7, 9, 13, 16, 18, 25, 32

HW Topics: Understand concepts & vocabulary related to loan payments, credit cards, & mortgages (6); Calculate loan payments, total payments, & total interest & principal (5)

Mini Project 4D: Car Buying

Mini Project 4B: Can You Quit if You Win the Lottery?

Week 10

Test Review and Presentation of Projects; Theme 2 Test