Examination 2 Study Guide

Examination setup

There will be 5 questions on this exam, each worth approximately 20 points. These questions will be multi-step problems, which means they will have several parts. You will have 55 minutes to take this exam. The total point value will be 100 points, and the test will account for 15% of your class grade. **NO CALCULATORS, NOTES, TEXTBOOKS, ETC PERMITTED. USE OF THESE DURING THE TEXT CONSTITUTES CHEATING AND WILL RESULT IN A FAILING GRADE!**

Covered Material

This exam will cover chapters 3 and 4 of the text.

Section 3A: Uses and Abuses of Percentages
Section 3B: Putting Numbers in Perspective
Section 3C: Dealing with Uncertainty
Section 3D: Index Numbers
Section 3E: This section is excluded from the second exam.
Section 4A: Taking control of your finances
Section 4B: Simple and Compound Interest
Section 4C: Savings Plans and Investments
Section 4D: Loan Payments, Credit Cards, and Mortgages
Section 4E: Income Taxes
Section 4F: This section is excluded from the second exam.

Types of Questions

- There will be ONE question on income taxes. It will involve some of the following: computing marginal tax rates; determining what tax bracket an individual falls in; computing gross income; computing adjusted income; determining taxable income; itemization; and computing FICA taxes. **Make sure you read section 4E thoroughly and understand it (ignore Capital Gains Taxes and Dividend Taxes)!**
- There will be ONE question regarding absolute and relative change/difference. **Section 3A has all the pertinent information. Read it and study the examples in the text and notes. LOOK AT THE SOLUTIONS FOR THE TAKE-HOME QUIZ! There was a similar problem in that quiz.**
- There will be ONE question regarding algebra. You will be asked to solve for various variables in equations. At least one of these equations will be from chapter 4 (It will be listed on the formula sheet. Your job will be to isolate the requested variable in that equation.) **Read your class notes and the algebra reviews on pages 240 and 253 of your textbook.**
- There will be ONE question involving selecting the appropriate formula from chapter 4 and setting up the formula. **I have given many examples of this in class. Your take-home worksheet gives some other examples of this question type.**
- The last question will be at my discretion and will come from one or more of the other sections we have covered in chapters 3 and 4.

NOTES: Read all of the sections above! If you have questions, come during office hours. Look over the lecture notes! Study your WeBWorK homework, the worksheet, and the take-home quiz. They are your sample exam!
WARNING: FAILURE TO SHOW LEGITIMATE WORK ON A QUESTION OF THIS TEST OR NOT LABELING YOUR ANSWERS WILL RESULT IN AN INSTANT ZERO ON THAT QUESTION. SHOW WORK AND BE ORGANIZED.

These are some sample questions. Please note that your questions may be constructed differently. The examples below DO NOT demonstrate all of the concepts you need to know. They are just "samples."

1. Frank has wages totaling $50,000 and tips totaling $300. He earned $1200 in interest on his bank accounts. He has $3,500 in home mortgage interest. Also, this year Frank deposited $1,000 in an IRA. Assuming Frank is single with no dependents, do the following. Note that you'll need the marginal tax rates chart on the formula sheet for some of these questions. SHOW ALL WORK! NO APPLICABLE WORK MEANS NO CREDIT! (20 PTS)
    a. If Frank has the following tax deductable expenditures, should he itemize or take the standard deduction his filing status entitles him to? SHOW YOUR WORK AND EXPLAIN!
        $3,500 for a home mortgage
        $1,200 donation to the Red Cross
        $500 donation to the Salvation Army
        $300 for state income taxes
    b. Assume that Frank has a taxable income of $38,000. Show the setup for computing his marginal taxes. SHOW ALL WORK!
    c. Show the setup for computing Frank's FICA taxes. You needn't perform the additions, multiplications, etc.
2. You are considering the purchase of a Lexus or a Honda. If the Honda costs $20,000 and the Lexus costs $50,000, do the following. SHOW ALL WORK AND LABEL ANSWERS! YOU MAY WRITE RELATIVE DIFFERENCES AS FRACTIONS.
    a. Compute the absolute and relative differences between the Honda and the Lexus using the Lexus as the reference value.
    b. Compute the relative difference between the Lexus and the Honda, where the Honda is the reference value.
    c. Suppose the cost of the Lexus were to increase from $50,000 to $60,000 while the cost of the Honda stays the same. What will this do to your answers in part a? IE, do they stay the same, go up, go down? Explain briefly.
3. Solve for the indicated variables. SHOW ALL STEPS. NO WORK WILL RESULT IN NO POINTS!
    a. $2x = 4x + 3$ Solve for x:
    b. $\frac{1}{2}(3R + 5Y) - \frac{2}{5} = \frac{8}{5}$ Solve for R:
    c. Solve the "Compound Interest Formula" for APR
4. For this problem, you'll need to pick the correct formula from the formula sheet for the given situation and then set up the formula so that, if you computed the solution on a calculator, you'd get the correct answer. See your worksheet and class notes for ample examples of this. BE CAREFUL TO UNDERSTAND WHAT EACH VARIABLE IN THE FORMULAS MEANS!
5. This question is at my discretion.