Midterm I: Some problems for review

The exam will be taken at the Testing Center during 10/02 - 10/03. At the Testing Center, you go to Canvas and navigate to Midterm I in Week 6 module. Then you will be directed to MyLab Math. It will ask you for an access code. The proctor will give you the code.

The material covered is Section 1A, 1B, 1C, 1D, 3A, 3B, 3C. It is a closed book exam. A scientific calculator is allowed. Graphing/programmable/transmittable calculators are not allowed. Phones are not allowed. You should review the homework problems, worksheets, quizzes, examples given in the lectures. It is always a good idea to study for the exam with someone. Some problems to practice:

1) Make a truth table for (p and r) or (q and r).

2) List all the sets of numbers (natural, integer, rational, real) that contain 1.212212212212…

3) Convert the number in Problem 2 into a fraction of whole numbers.

4) Give an example of an inductive argument. Evaluate the strength of that argument.

5) Give an example of a valid, but not sound, deductive argument.

6) From 08/2021 to 08/2023, the unemployment rate in the US rose by 0.3 percentage point to 3.8 percent. What was the unemployment rate in 08/2021?

7) From 2010 to 2018, the 4-graduation rate of University of Hawaii-Manoa has risen by 101.1% to 35.2%. What was the 4-graduation rate in 2010?

8) Round the following numbers to the nearest hundred, ten, tenth, and hundredth.

1562.1651

-265.1515

9) If the true length of a table is 123 centimeters but the measurement tells 121 centimeters. What is the absolute error? What is the relative error (percentage)?

10) Round 45/1241

a) to 4 decimal places

b) using 4 significant digits

11) How many ten thousands are there in a trillion?