Discrete Mathematics, Sect 001, 2016 Fall - Quiz 1

September 14, 2016

Name:

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This quiz is scheduled for 10 minutes. No outside notes or calculators are permitted. To get full credit in all of the problems, use rigorous justification and unless otherwise indicated, make sure that your solution reads as a perfect English sentence. You should only assume the notion of integers, operations, order relations and geometrical objects as given. If you use a statement or a definition from the textbook, make sure to indicate it.

1. (20 points)

   (a) State the definition of divisibility.

   (b) Using the definition of divisibility above, prove or disprove the following statement:

   Proposition. *If a, b, c are integers, and $a|b$ then $ac|bc$.*

2. Now switch your quiz with a person sitting next to you when ready of when the time runs out. Respectfully critique each other's work. Put both of your name on both quizzes indicating who was the original owner and hand it in together. You are allowed to make only minor adjustments, like fixing typos or phrasing but not to write down something completely new.