HOMEWORK 17
DISCRETE MATHEMATICS I
DUE 04-09

(1) Prove that, for every integer n, we have $n \mid n$.

(2) Prove your answers.
   (a) For which integers n is it true that $1 \mid n$?
   (b) For which integers n is it true that $n \mid 1$?

(3) Prove your answers. *Don't* say "it is impossible to divide by 0"; use the *definition* of divisibility.
   (a) For which integers n is it true that $0 \mid n$?
   (b) For which integers n is it true that $n \mid 0$?

- **Two** book problems: #3.1.27, 33.