

## Extra credit problems

Math 485

0. Find a mistake or misprint in “Extra pearls”. (The score depends on the type of mistake.)

1. Assume  $d_1, \dots, d_p$  is a sequence of integers in a nonincreasing order. Show that it is multigraphic if and only if  $d_p \geq 0$ , the sum  $d_1 + \dots + d_p$  is even and

$$d_1 \leq d_2 + \dots + d_p.$$

(A sequence of integers  $d_1, \dots, d_p$  is called *multigraphic* if it appears as a sequence of degrees of a multigraph.)