

Physics 325
Quiz 3, January 29 2009

Name: _____

1. Two protons in the same nucleus can/cannot (circle one) have the same quantum numbers because a proton is a fermion/boson (circle one).

2. The nucleus ^{60}Co has
how many protons?

how many neutrons?

3. The radius of a nucleus is proportional to which power of A ?

4. A term in the semi-empirical mass formula that's proportional to $A^{2/3}$ depends on what feature of the nucleus?