**Homework 1 PHYS 211 Dr. Amir**

**2.** How many significant figures do each of the following numbers have: (*a*) 214, (*b*) 81.60, (*c*) 7.03, (*d*) 0.03, (*e*) 0.0086, () 3236, and (*g*) 8700?

1. Write the following numbers in powers of ten notation: (*a*) 1.156, (*b*) 21.8, (*c*) 0.0068, (*d*) 328.65, (*e*) 0.219, and () 444.
2. Add ($9.3×10^{3}s)+\left(8.3×10^{4}s\right)+(0.008×10^{6}s)$

**11.** Write the following as full (decimal) numbers with standard units: (*a*) 286.6 mm, (*b*) 85μV (*c*) 760 mg, (*d*) 60.0 ps, (*e*) 22.5 fm, () 2.50 gigavolts.

**13**. Determine your own height in meters, and your mass in kg.

1. Determine the conversion factor between (*a*) kmh and mih, (*b*) ms and fts, and (*c*) kmh and ms.
2. The diameter of the Moon is 3480 km. (*a*) What is the surface area of the Moon? (*b*) How many times larger is the surface area of the Earth?