

### Ch 18 HW Quiz #2A

A 75-gram styrofoam ball carries a positive charge of  $3.14 \mu\text{C}$  and is suspended vertically by a thin string from the ceiling. The ball is also immersed in a uniform electric field. The tension in the string is measured to be 1.378 Newtons. Assume that gravity, tension and the electric force are the only relevant forces in this problem. What is the magnitude and direction of the electric field? Answer with 2 SF.

