

Homework 16 for September 24 2008

Due 8AM on September 25 2008

Physics 221 with Professor Jeff Terry

1. A charge  $+q$  is at the origin and a charge  $-2q$  is at  $x=2.00\text{m}$  on the  $x$ -axis. For what finite value(s) of  $x$  is the  $E$  field zero, and for what value(s) of  $x$  is the electric potential zero?
2. How much work is required to assemble four identical point charges of magnitude  $Q$  at the corners of a square of side  $s$ ?