

Ch 19 HW Quiz #2B

A 350-gram rock with a charge of $-520\ \mu\text{C}$ is thrown horizontally from a cliff that is 85 meters above ground level with an initial speed of 15 m/s. The rock strikes the ground at a horizontal distance of 92 meters from the base of the cliff. Assume only gravity and the electric force are relevant in this problem, and assume the electric field points either vertically up or down.

- a) What is the magnitude and direction of the uniform electric field in this region?
- b) If the voltage at the top of the cliff is assumed to be exactly 0.0 Volts, what is the voltage at ground level?