

Chapter 18 4-Minute Drill

Coulomb's Law $\frac{kQ_1Q_2}{r^2}$

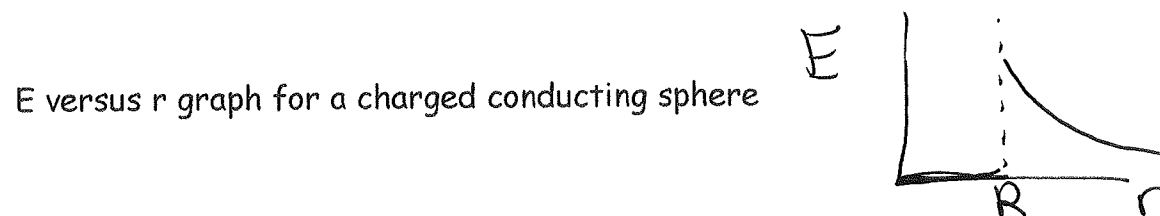
Electric field of a point charge $\frac{kQ}{r^2}$

Force on a charge in an electric field qE

Acceleration of a charge in an electric field $\frac{qE}{m}$

Electric field inside a conductor \emptyset

Direction of an electric at the surface of a conductor perpendicular



Direction of the electric field due to a positive point charge radially outward

Direction of the electric field due to a negative point charge radially inward

Kinematic equation for the final velocity in terms of acceleration and time $V_f = V_0 + at$

Kinematic equation for final velocity in terms of acceleration and displacement $V_f^2 = V_0^2 + 2ax$

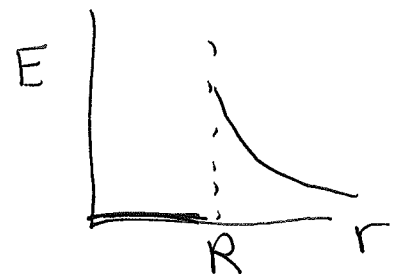
Chapter 18 4-Minute Drill - Take Two

Direction of the electric field due to a negative point charge *radially inward*

Electric field inside a conductor \emptyset

Acceleration of a charge in an electric field $\frac{qE}{m}$

E versus r graph for a charged conducting sphere



Electric field of a point charge $\frac{kQ}{r^2}$

Direction of the electric field due to a positive point charge *radially outward*

Direction of an electric at the surface of a conductor *perpendicular*

Kinematic equation for the final velocity in terms of acceleration and time $V_f = V_0 + at$

Coulomb's Law $\frac{kQ_1Q_2}{r^2}$

Force on a charge in an electric field qE

Kinematic equation for final velocity in terms of acceleration and displacement $V_f^2 = V_0^2 + 2ax$