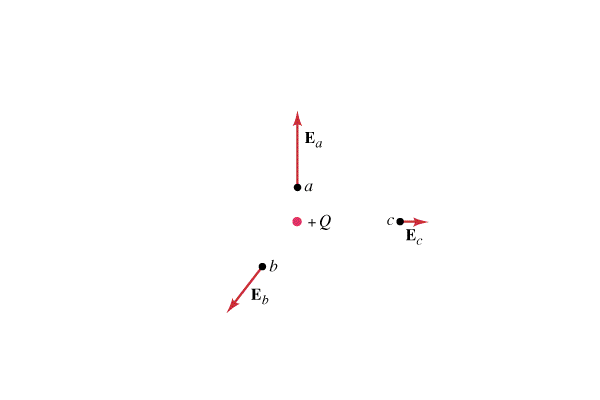
**Noteguide for Point Charges and Masses - Videos 16F Name**

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| --- | --- |
| Field:  g - g near a point mass toward mass (N/kg)  G - 6.67x10-11 Nm2kg-2  M - the mass (kg)  r - distance from the point mass (m) | Field:  (not in data packet)  E - E near a point charge away from charge (N/C)  k - 8.99x109 Nm2C-2  q - the charge (C)  r - distance from the point charge (m) |



Example: What is the electric field 2.0 m to the right of a -21 μC charge?

Whiteboards - Work these out - if you don't get the right answer, watch the video to see how to do it.

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| 1.Vera Similitude measures the electric field 13.5 m to the right of a -1.45 μC charge. What electric field in what direction?  (71.5 N/C to the left) | 2. Vesta Buhl measures an electric field of 2,120 N/C, 67 cm from a charge of unknown value. The electric field is away from the charge. What is the charge? (+0.11 μC) |
| 3.Amelia Rate measures a gravitational field of 3.4 N/kg. What distance is she from the center of the earth?  (Me = 5.98 x 1024 kg.) (1.1 x 107 m) | 4. Tara Bull measures an electric field of 10. N/C what distance from an electron? (12 μm) |