$$E = kq\left[\frac{1}{x^2} - \frac{x}{\left(R^2 + x^2\right)^{\frac{3}{2}}}\right] = kq\left\{\frac{1}{x^2} - \frac{x}{x^3\left[1+\left(\frac{R}{x}\right)^2\right]^{\frac{3}{2}}}\right\} \approx kq\left\{\frac{1}{x^2} - \frac{1}{x^2\left[1+\frac{3}{2}\left(\frac{R}{x}\right)^2 + ...\right]}\right\} =$$

$$= kq\frac{1+\frac{3}{2}\left(\frac{R}{x}\right)^2 - 1}{x^2\left(1+\frac{3}{2}\frac{R^2}{x^2}\right)} \approx kq\frac{\frac{3}{2}\frac{R^2}{x^2}}{x^2+\frac{3}{2}R^2} = kq\frac{3}{2}\frac{R^2}{x^4} = \frac{3qR^2}{8\pi\varepsilon_0 x^4}$$

Explanations:

$\left[1+\left(\frac{R}{x}\right)^2\right]^{\frac{3}{2}} = 1+\frac{3}{2}\left(\frac{R}{x}\right)^2 + ... \approx 1+\frac{3}{2}\left(\frac{R}{x}\right)^2$ …series expansion

$x^2 + \frac{3}{2}R^2 \approx x^2$ …because $x \succ\succ R$