

$$r = \text{Sqrt}[x^2 + y^2 + z^2]$$

$$\sqrt{x^2 + y^2 + z^2}$$

$$f = 1 / r;$$

$$\text{Grad}[f, \{x, y, z\}]$$

$$\left\{ -\frac{x}{(x^2 + y^2 + z^2)^{3/2}}, -\frac{y}{(x^2 + y^2 + z^2)^{3/2}}, -\frac{z}{(x^2 + y^2 + z^2)^{3/2}} \right\}$$

$$\text{Laplacian}[q, \{x, y, z\}]$$

$$\frac{3x^2}{(x^2 + y^2 + z^2)^{5/2}} + \frac{3y^2}{(x^2 + y^2 + z^2)^{5/2}} + \frac{3z^2}{(x^2 + y^2 + z^2)^{5/2}} - \frac{3}{(x^2 + y^2 + z^2)^{3/2}}$$

$$\text{Simplify}[\%]$$

$$0$$