Kernels and derivatives:

$$
\begin{aligned}
-4\pi K_{MR} &= \frac{\mathbf{x}}{R^3}, \\
R^2 &= \mathbf{x}.\mathbf{x} + \epsilon^2, \\
-4\pi \frac{\partial K_{MR}}{\partial x} &= -\frac{3x}{R^5}\mathbf{x} + \frac{\mathbf{i}}{R^3}, \\
-4\pi K_{WL} &= \frac{R^2 + 3\epsilon^2/2}{R^5}\mathbf{x}, \\
-4\pi \frac{\partial K_{WL}}{\partial x} &= -x\frac{3R^2 + 15\epsilon^2/2}{R^7}\mathbf{x} + \frac{R^2 + 3\epsilon^2/2}{R^5}\mathbf{i}.
\end{aligned}
$$