You may wish to recall the following facts:

$$
\begin{aligned}
** &= (-1)^{p(n-p)+s} \\
d^2 &= 0 \\
\beta \wedge \alpha &= (-1)^{pq}\, \alpha \wedge \beta \\
\alpha \wedge *\gamma &= g(\alpha, \gamma)\, \omega \\
d(\alpha \wedge \beta) &= d\alpha \wedge \beta + (-1)^p\, \alpha \wedge d\beta
\end{aligned}
$$

You may wish to use the following relationships in (Euclidean) $\mathbb{R}^3$:

$$
\begin{aligned}
\vec{\boldsymbol{F}} \cdot d\vec{\boldsymbol{r}} &= F \\
\vec{\nabla} f \cdot d\vec{\boldsymbol{r}} &= df \\
(\vec{\nabla} \times \vec{\boldsymbol{F}}) \cdot d\vec{\boldsymbol{r}} &= *dF \\
\vec{\nabla} \cdot \vec{\boldsymbol{F}} &= *d{*F} \\
\triangle f = \vec{\nabla} \cdot \vec{\nabla} f &= *d{*df}
\end{aligned}
$$