• We wish to expand $\nabla^2 \vec{r}$

$$\nabla^2 \vec{r} = \vec{\nabla}(\vec{\nabla} \cdot \vec{r}) - \vec{\nabla} \times (\vec{\nabla} \times \vec{r}) \quad \text{using D11}$$

$$= \vec{\nabla}(3) - 0 \quad \text{using D13 \& D14}$$

$$= 0$$