

## 2.5 #2

Prove that Laplace's equation  $\Delta u = 0$  is rotation invariant, that is, if  $O$  is an orthogonal  $n \times n$  matrix and we define

$$v(x) = u(Ox) \quad (x \in \mathbb{R}^n),$$

then  $\Delta v = 0$ .