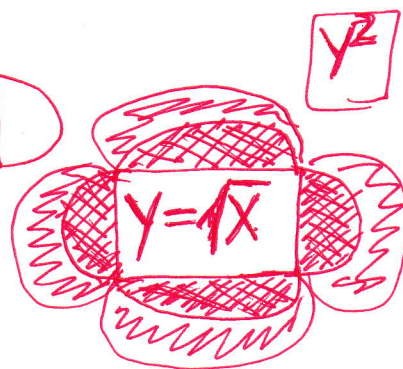


$$\text{Var}(\nabla X_i) = \mathbb{E} \left[(\nabla X_i - \nabla \mu)^2 (\nabla X_i - \nabla \mu) \right]$$

$$\begin{aligned} \nabla \text{Var}(X_i) &= \nabla \mathbb{E}[(X - \mu)^2] \\ &= \mathbb{E}[2(X - \mu)(\nabla X - \nabla \mu)] \end{aligned}$$

$$\begin{aligned} \text{Var}(\nabla X_i(t)) &= \nabla^2 \text{var}(X(t)) \\ &= \mathbb{E}[(Y - \mu_Y)^2] \end{aligned}$$



$$= \mathbb{E}[(\sqrt{X} - \mu_Y)^2] = \mathbb{E}[X - 2\mu_Y \sqrt{X} + \mu_Y^2]$$

$$Y(s) = \int \int f(t) f(r) \cos(2\pi f r s) \cos(2\pi t s) dt dr$$