

Quiz Problem 3  
Due Feb. 18th, 11:59 pm EST

**Problem.**

Let  $X_n \stackrel{iid}{\sim} \text{Gamma}(\alpha, \beta)$  where the PDF of a  $\text{Gamma}(\alpha, \beta)$  is

$$f(x) = \frac{\beta^\alpha}{\Gamma(\alpha)} x^{\alpha-1} \exp(-\beta x) \text{ for } x > 0$$

What is a methods of moments estimator for  $\alpha$  and  $\beta$ ?

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