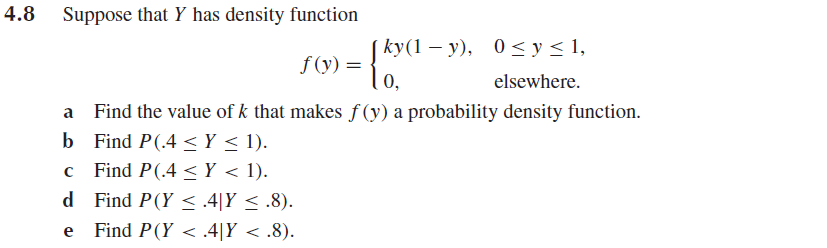
**STA 504 Homework #3**

**Due: Monday, September 23**

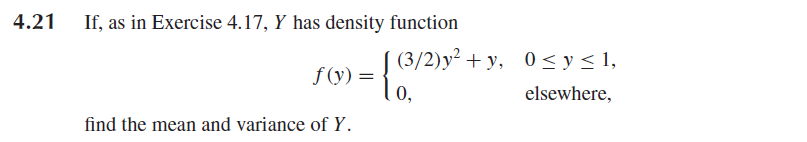
**Show you’re your work to earn full credit. You are encouraged to work with your peers on assignments. The write-up must be your own.**

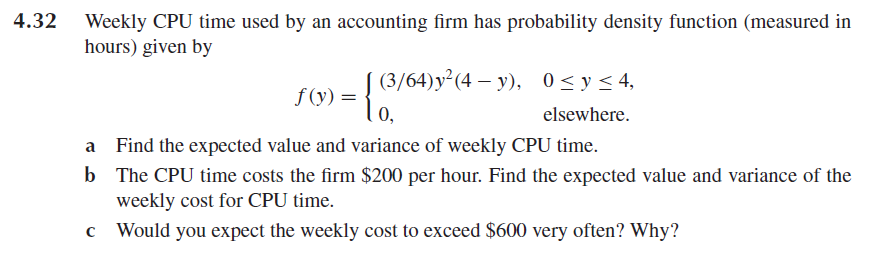
**Note**: The following questions are based on the definition of continuous random variables and their distribution functions [probability density function (pdf) and cumulative distribution function (CDF)]; conditions for a given function to be a valid pdf; the relationship between pdf and CDF, etc. You are expected to have a clear understanding of these basic concepts.

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