

Group _____ Names _____

Group Quiz for Section 3.3

1. Recall the example from last time: you have an insurance policy with a \$500 deductible. The amount Y of your bill is distributed uniformly in $[100, 1500]$. The amount X that you actually pay is

$$X = g(Y) = \begin{cases} Y, & Y \leq 500; \\ 500, & Y > 500. \end{cases}$$

What do you pay on average; i.e., what is $\mathbb{E}[X]$?