Quiz Problem 6
Due Oct. 1st, 11:59 pm EST

Problem.

Let Y be a continuous random variable with probability density function given by

$$f(y) = \begin{cases} cy^2(1-y^4) & 0 \leq y \leq 1, \\ 0, & \text{else} \end{cases}$$

for some unknown value $c \in \mathbb{R}$. What is the value of c that makes f a PDF? What is $\mathbb{E}[Y]$?

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