

Quiz 10

True/False - No explanation needed. (1pt for correct, 0pt - no answer, -1pt - incorrect)

1. If the the variance exists, the mean exists. True/False
2. If a RV X is scaled up by 2 times, i.e. $2X$, its standard deviation is scaled up by 4 times. True/False

Problems - Need justification. No justification means **zero**!

1. (10pts) Given a RV X having the PDF $f(x) = c(4 - x^2)$ for $-1 \leq x \leq 2$ and $f(x) = 0$ otherwise. Find the variance of X (in term of c).