AAG

PROBLEM # 1

Let X denote checkout time duration with pdf

$$f(x) = .5x \quad 0 < x < 2$$

a. Computer $E(X)$
b. Compute the second moment around the origin: $E(X^2)$.
c. Compute the second moment around the mean: $E(x-\mu)^2$.

PROBLEM # 2

The weekly demand for propane gas (in 1000s of gallons) from a particular facility is a random variable X with pdf

$$f(x) = 2[1-(1/x^2)] \quad 1 < x < 2$$

a. Estimate a value for the 25th percentile.
b. Estimate a value for the median.
c. Estimate a value for the standard deviation.