

# BONUS Week 11 Homework

⚠ This is a preview of the published version of the quiz

Started: Jul 2 at 7:54am

## Quiz Instructions

### Question 1

1 pts

(Lesson 8.8: Method of Moments.) BONUS: Suppose that we observe  $X_1 = 5$ ,  $X_2 = 9$ , and  $X_3 = 1$ . What's the method of moments estimate of  $E[X^2]$ ?

MOM estimator for  $E[X^k]$  is  $m_k \equiv \frac{1}{n} \sum_{i=1}^n X_i^k$

☐ a. 5

in this case:

☐ b. 25

MOM estimator for  $E[X^2]$  is

☒ c. 35.7

$$m_2 \equiv \frac{1}{3} [5^2 + 9^2 + 1^2]$$

☐ d. 1/5

$$= \frac{1}{3} [107]$$

☐ e. 1/25

$$= 35.66...$$

Not saved

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