

- 38.** An insurer has data on losses for four policyholders for 7 years. The loss from the i^{th} policyholder for year j is X_{ij} .

You are given:

$$\sum_{i=1}^4 \sum_{j=1}^7 (X_{ij} - \bar{X}_i)^2 = 33.60$$

$$\sum_{i=1}^4 (\bar{X}_i - \bar{X})^2 = 3.30$$

Using nonparametric empirical Bayes estimation, calculate the Bühlmann credibility factor for an individual policyholder.

- (A) Less than 0.74
- (B) At least 0.74, but less than 0.77
- (C) At least 0.77, but less than 0.80
- (D) At least 0.80, but less than 0.83
- (E) At least 0.83