

251. For a group of policies, you are given:

- (i) The annual loss on an individual policy follows a gamma distribution with parameters $\alpha = 4$ and θ .
- (ii) The prior distribution of θ has mean 600.
- (iii) A randomly selected policy had losses of 1400 in Year 1 and 1900 in Year 2.
- (iv) Loss data for Year 3 was misfiled and unavailable.
- (v) Based on the data in (iii), the Bühlmann credibility estimate of the loss on the selected policy in Year 4 is 1800.
- (vi) After the estimate in (v) was calculated, the data for Year 3 was located. The loss on the selected policy in Year 3 was 2763.

Calculate the Bühlmann credibility estimate of the loss on the selected policy in Year 4 based on the data for Years 1, 2 and 3.

- (A) Less than 1850
- (B) At least 1850, but less than 1950
- (C) At least 1950, but less than 2050
- (D) At least 2050, but less than 2150
- (E) At least 2150