

Your submission is being evaluated based on the following:

- (~ 20%) Presentation of mathematical work to an external audience (aka me):

Quality of organization/clarity of presentation - use of formatting/chunks/etc, logical presentation of content

F — D^- — D — D^+ — C^- — C — C^+ — B^- — B — B^+ — A^- — A — A^+

Quality of commentary - purpose for each chunk/subchunk of code is clearly expressed in a concise manner

F — D^- — D — D^+ — C^- — C — C^+ — B^- — B — B^+ — A^- — A — A^+

- (~ 80%) Met expectations for the mathematical components

- Empirical distributions/appropriate graphs
- Select and justify a threshold/benchmark for “large” claims if the data supports it (if not, why not)
- Parametric distribution(s) with parameter estimates (MOM, percentile matching, LSE, MLE) - at least two distribution families for each scenario should be presented

Omari et al. claim that MLE often yields the better estimate compared to the other estimators. Determine if your results support this claim.

- All appropriate test results for each model/parameter combination, reporting both numerical evidence from tests and graphical evidence of the distribution fit
- Simulate ten runs of 1 year of claims using your best models - include a robust summary of the data from the simulation (consider usual/best/worst cases)

F — D^- — D — D^+ — C^- — C — C^+ — B^- — B — B^+ — A^- — A — A^+

Overall grade:

F — D^- — D — D^+ — C^- — C — C^+ — B^- — B — B^+ — A^- — A — A^+

Penalty: poor presentation, failure to follow directions, disproportionate contribution to work, etc.

_____ / 150 points