		A paper	B paper	C paper	Points Available
Task 1: Simulation Study					
Correctness		Uses the correct sampling scheme, samples of the correct size, the correct population of values, and calculates sample statistics correctly.	One or two small errors in code results in one or two examples of incorrect sampling, sample size, population or statistics.	Multiple errors in code result in three or more examples of incorrect sampling, sample size, population or statistics.	**0.5*4**
Completeness	**Numerical results**	Reports centers and spreads of sampling distribution for all statistics and all required sample sizes.	Reports centers and spreads for some statistics and some required sample sizes.	Fails to report centers and spreads.	**0.5*4**
	Graphical results	Uses histograms of the sampling distributions to support observations.	Some histograms are provided but are not referred to, or do not support observations.	No histograms included.	**0.5*4**
	Observation	For each statistic, summarizes the behavior of the sampling distribution as the sample size increases. Relates properties of the sampling distribution to the properties of the population.	Some of the numerical and graphical results are summarized, but no comparison to the population value is made.	No summary of the numerical and graphical results is provided.	**0.5*4**
Synthesis		Contrasts behavior between statistics. Relates behavior to concepts covered in class where appropriate. Reflects on statements provided, and identifies cases where they do and do not apply.	The behavior of the statistics is compared but there is no reflection on how this relates to concepts covered in class or the statements given as prompts.	Behavior is summarized but not compared or contrasted between statistics.	**2**
Task 2: Data Analysis					
Methods	**Choice of procedure**	Uses an appropriate procedure and justifies the choice of procedure.	Uses an appropriate procedure but doesn't justify the choice.	Uses an inappropriate procedure.	**1*3**
	Evaluation of assumptions	The assumptions of the procedure(s) are clearly stated. Each assumption is evaluated for possible violations, with plots where appropriate, or through discussion of the study design. Where there is evidence an assumption may be violated, justification is given for robustness of the procedure to the violation, or an appropriate caveat is added to the summary.	Assumptions are listed but they are incorrect or incomplete. Some but not all assumptions are evaluated, or they are taken to be true without justification. Robustness to a violation is invoked when it isn't appropriate, or without justification.	Assumptions are neither listed nor evaluated.	**1*3**

	Numerical results	The report includes appropriate and correct numerical or graphical summaries of the results. E.g. relevant descriptive statistics, test statistics and p-values, point estimates and confidence intervals.	The report includes numerical or graphical summaries of the results but there are some incorrect values, or missing information.	The report fails to include numerical or graphical summaries of the results.	**1*3**
Results	**Accuracy**	The numerical results are translated into a non-technical summary correctly.	There are a few minor errors in the reporting.	The wrong conclusions are drawn from the analysis.	**1*3**
	Completeness	The summary includes appropriate quantifications of uncertainty. Includes both the procedure and relevant numerical quantities. Includes a comment on the appropriate scope of inference, and adds any appropriate caveats based on observations made in the analysis.	The summary is mostly complete but may be missing a few minor details. The scope of inference is not discussed or is incorrect or confusing.	The summary is missing many details, there in no discussion of scope of inference.	**0.5*3**
	Clarity	The summary avoids any technical jargon or mathematical notation that would be unfamiliar to a general audience. The results are placed in context. Values are reported along with appropriate units and with an appropriate number of digits.	The summary is mostly free of technical jargon. Values are reported without units or with two many decimal places.	The summary uses confusing wording, or is not given in the context of the data.	**0.5*3**

General

Supplemental Materials	Files used in the creation of the report are uploaded as supplemental materials. The files submitted contain all the R code necessary to reproduce the results in the report, and the code runs without error.	Some files are uploaded, but they are incomplete, don't match the submitted PDF, or contain code that exits with errors.	Supplemental materials are missing.	**2**
Professionalism	Report doesn't include R code or raw R output, but instead uses figures, tables, or narrative to communicate methods and results.	Report shows some attempt to selectively include R code or raw R output, but in some places still relies on a reader being able to parse R code or output.	No attempt to selectively include R code or raw R output.	**2**
Structure	In addition to report being clearly labelled with students name, and section headings used facilitate navigation, the document reads fluidly as a unified report, not a series of answers to homework questions.	Report is clearly labelled with students name, section headings are used to facilitate navigation in the document.	Student name is missing. Report is hard to follow because section headings aren't used, or structure is confusing.	**1**
			Total points available	30