

Exam GIRR

Date: Wednesday, May 10, 2023

INSTRUCTIONS TO CANDIDATES

General Instructions

1. This examination has 14 questions numbered 1 through 14 with a total of 70 points.

The points for each question are indicated at the beginning of the question.

2. While every attempt is made to avoid defective questions, sometimes they do occur. If you believe a question is defective, the supervisor or proctor cannot give you any guidance beyond the instructions provided in this document.

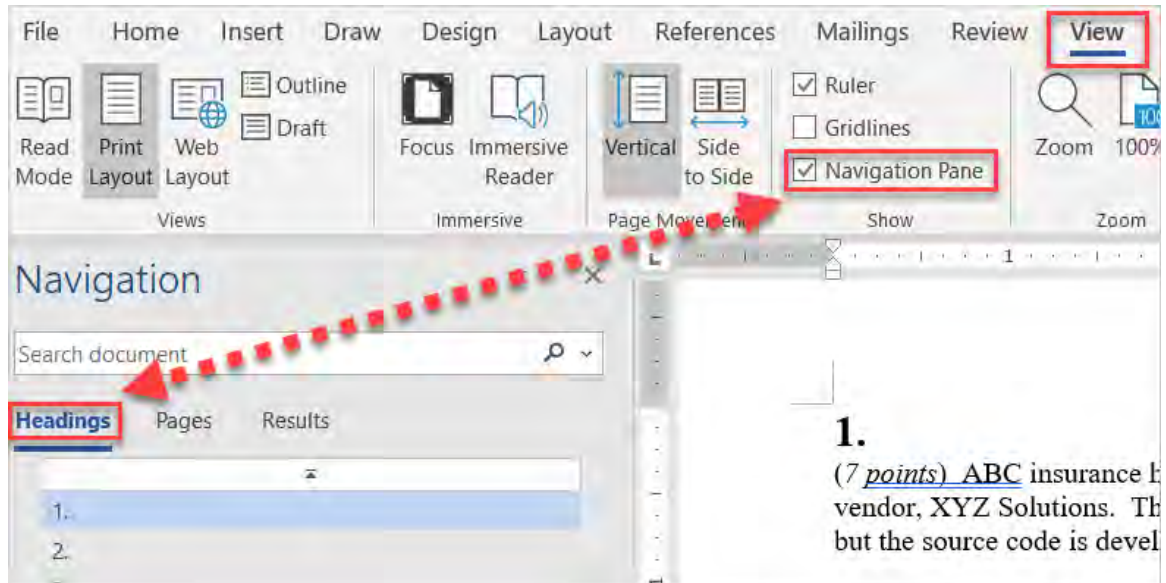
Written-Answer Instructions

1. Each question part or subpart should be answered either in the Word document or the Excel file as directed. Graders will only look at work in the indicated file.
 - a) In the Word document, answers should be entered in the box marked ANSWER. The box will expand as lines of text are added. There is no need to use special characters or subscripts (though they may be used). For example, β_1 can be typed as beta_1 and σ^2 can be typed as sigma^2.
 - b) Calculations should be done in Excel and entered as formulas. Performing calculations on scratch paper or with a calculator and then entering the answer in the cell will not earn full credit. Formatting of cells or rounding is not required for credit. Rows can be inserted to the answer input area as required to provide space for your answer.
 - c) Individual exams may provide additional directions that apply throughout the exam or to individual items.
2. The answer should be confined to the question as set.
3. Prior to uploading your Word and Excel files, each file should be saved and renamed with your five-digit candidate number in the filename.
4. The Word and Excel files that contain your answers must be uploaded before the five-minute upload period expires.

Navigation Instructions

Open the Navigation Pane to jump to questions.

Press Ctrl+F, or click View > Navigation Pane:



1.

(5 points) HIJ Insurance writes both 6-month and 12-month policies for a line of business. You are given the following:

- On January 1, 2020, the following policies were in-force:
 - 7,500 6-month policies with an average premium of 400
 - 12,000 12-month policies with an average premium of 750
- There were no new policies written in 2020, but all in-force policies were renewed upon expiry.
- All premiums were increased by 5% for policies renewed on or after January 1, 2020.
- Due to COVID-19, there was a 10% rate reduction effective for all new, renewed, and in-force policies on April 1, 2020.
- All premiums were increased by 8% for policies written or renewed on or after July 1, 2021.
- There have been no additional rate changes since July 1, 2021.
- It is assumed that the key assumptions of the parallelogram method are valid.

(a) (1 point) State the two key assumptions of the parallelogram method.

Provide the response for this part in the Excel spreadsheet.

(b) (3.5 points) Calculate the calendar year 2020 on-level premium to be used for a ratemaking analysis.

Provide the response for this part in the Excel spreadsheet.

(c) (0.5 points) Provide two examples of general insurance policies where exposures are not usually earned evenly throughout the policy term.

Provide the response for this part in the Excel spreadsheet.

2.

(5 points) You are constructing claims data files for a ratemaking analysis.

- (a) (1 point) Provide one advantage and one disadvantage to aggregating claims data by policy year.

ANSWER:

- (b) (0.5 points) Provide one disadvantage to aggregating claims data by report year.

ANSWER:

You are given the following claims data aggregated by accident year:

Accident Year	Reported Claims					
	12	24	36	48	60	72
2017	2,147,785	3,025,674	3,620,901	4,136,684	4,362,359	4,382,594
2018	2,219,814	3,071,925	3,876,926	4,331,668	4,596,920	
2019	2,342,602	4,154,013	4,922,135	5,074,225		
2020	2,591,328	3,398,123	4,339,405			
2021	2,582,962	3,768,518				
2022	2,735,738					

Accident Year	Paid Claims					
	12	24	36	48	60	72
2017	1,249,954	2,244,328	3,004,204	3,728,241	4,161,007	4,367,084
2018	1,271,502	2,218,377	3,235,509	3,896,228	4,382,244	
2019	1,346,283	2,368,791	3,339,691	4,154,460		
2020	1,525,699	2,505,764	3,625,546			
2021	1,435,742	2,756,999				
2022	1,589,295					

2. Continued

Accident Year	Reported Counts					
	12	24	36	48	60	72
2017	729	895	998	1,082	1,119	1,122
2018	727	900	1,019	1,089	1,130	
2019	743	911	1,022	1,102		
2020	765	902	1,042			
2021	763	939				
2022	767					

Accident Year	Closed Counts					
	12	24	36	48	60	72
2017	466	697	855	991	1,075	1,118
2018	469	696	877	997	1,085	
2019	474	706	874	1,007		
2020	489	700	896			
2021	491	727				
2022	494					

It was subsequently discovered that a claim file was miscoded in the system as follows:

Transaction	Original		Corrected	
	Date	Amount	Date	Amount
Accident Date	Sep. 22, 2019	n/a	Sep. 22, 2019	n/a
Claim reported to company, case estimate established	<i>Nov. 1, 2020</i>	<i>900,000</i>	<i>Nov. 1, 2019</i>	<i>90,000</i>
Claim Payment	Dec 1, 2020	1,500	Dec 1, 2020	1,500
Claim Payment	Jul. 1, 2021	1,000	Jul. 1, 2021	1,000
Claim Payment	Mar. 1, 2022	57,500	Mar. 1, 2022	57,500
Change in case estimate	Mar. 1, 2022	<i>-500,000</i>	Mar. 1, 2022	<i>-50,000</i>

(c) (2.5 points) Construct new data triangles with corrections for this claim file.

Provide the response for this part in the Excel spreadsheet.

The calendar year 2022 changes for accident years 2016 and prior were:

- 15,700 in paid claims
- -8,500 in case estimates

(d) (1 point) Calculate calendar year 2022 reported claims, based on corrected data.

Provide the response for this part in the Excel spreadsheet.

3.

(5 points) You are estimating ultimate claims as of December 31, 2022 for reserving purposes.

- (a) (0.5 points) State the two key assumptions of the development method.

ANSWER:

- (b) (0.5 points) Describe an advantage of using paid claims instead of reported claims when applying the development method.

ANSWER:

- (c) (0.5 points) Describe an advantage of using reported claims instead of paid claims when applying the development method.

ANSWER:

- (d) (0.5 points) Describe one way you might account for the presence of large claims in the data when applying the development method.

ANSWER:

- (e) (1 point) Describe two ways you might account for limited credibility of the data when applying the development method.

ANSWER:

3. Continued

You are given the following:

Accident Year	Cumulative Paid Claims						
	12	24	36	48	60	72	84
2016	380,408	889,802	1,317,812	1,721,331	2,096,297	2,375,430	2,487,315
2017	450,310	869,371	1,402,540	1,868,637	2,216,571	2,507,208	
2018	348,866	965,278	1,457,682	1,919,642	2,328,436		
2019	367,455	1,019,276	1,546,088	2,091,115			
2020	455,227	1,033,085	1,650,625				
2021	516,038	1,140,537					
2022	408,139						

Accident Year	Projected Ultimate Claims from Reported Development Method
2016	2,513,084
2017	2,665,698
2018	2,809,772
2019	3,033,731
2020	3,200,828
2021	3,372,842
2022	3,500,773

- (f) (2 points) Calculate projected ultimate claims for all accident years using the paid development method.

Provide the response for this part in the Excel spreadsheet.

4.

(4 points) You are conducting an analysis of expenses for ratemaking purposes and are given the following:

Calendar Year	Earned Exposures	Direct Written Premiums	Direct Earned Premiums	Total Commission Expenses and Premium Taxes	General Expenses
2019	8,700	7,447,430	7,377,050	670,269	243,420
2020	9,150	7,895,360	7,846,640	710,582	253,065
2021	9,340	8,112,390	8,090,270	730,115	260,640
2022	9,240	8,097,340	8,083,570	728,761	268,436
2023 Budget	9,120	8,050,000	8,048,900	724,500	285,000

- Fixed expenses are 25% of general expenses.
- An unbudgeted system update will cost 2,500,000 to implement in 2023, and the cost will be spread over four years.

(a) (2.5 points) Recommend the total variable expense ratio to use in ratemaking. Justify your recommendation.

Provide the response for this part in the Excel spreadsheet.

(b) (1.5 points) Recommend the fixed expense per exposure to use in ratemaking. Justify your recommendation.

Provide the response for this part in the Excel spreadsheet.

5.

(8 points) You are trending earned premiums for ratemaking purposes and are given the following:

Experience Period	Earned Exposures by Policy Limits			
	500,000	1,000,000	1,500,000	2,000,000
2015	7,553	5,440	4,200	2,460
2016	7,504	5,511	4,320	2,574
2017	7,297	5,573	4,410	2,673
2018	7,218	5,536	4,501	2,806
2019	7,091	5,546	4,549	2,978
2020	7,011	5,598	4,675	3,125
2021	6,879	5,688	4,720	3,257
2022	6,906	5,685	4,758	3,403
Current Increased Limits Factors	0.85	1.00	1.13	1.24

- (a) (2 points) Recommend the annual premium trend due to the shift in policy limits to use for ratemaking. Justify your recommendation.

Provide the response for this part in the Excel spreadsheet.

You are given the following additional information:

- New rates are to be effective September 1, 2023 for one year.
- Premiums are written evenly throughout the year.
- Premiums are earned evenly throughout the policy term.
- Prior to January 1, 2020, all policies were written for 12-month terms.
- Since January 1, 2020, 75% of all policies have been written for 12-month terms and 25% of all policies have been written for 6-month terms.
- The annual trend due to a shift in deductibles is -0.1%
- The annual claim severity trend is 6% .
- The annual claim frequency trend is -1.2% .
- The ratio of ULAE to claims is 7% .
- The ratio of fixed expenses to premiums at current rates is 5% .
- The ratio of variable expenses to premiums is 23% .
- The ratio of profit and contingencies to premiums is 4% .

5. Continued

Accident Year	Earned Premiums	Premium On-Level Factors	Ultimate Claims
2018	15,804,847	1.064	8,703,669
2019	15,333,428	1.106	9,184,011
2020	15,526,085	1.104	9,602,493
2021	16,625,910	1.049	10,401,614
2022	17,102,494	1.026	11,309,041

- (b) (4 points) Calculate the indicated rate level change for this line of business using a claims ratio approach. Justify any selection(s).

Provide the response for this part in the Excel spreadsheet.

- (c) (0.5 points) Describe one reason why an indicated rate change using a pure premium approach may not result in the same result as part (b).

Provide the response for this part in the Excel spreadsheet.

Your colleague calculated the indicated rate change for this line of business to be 6%. The company's management decided to increase rates by 3%.

- (d) (1 point) Calculate the profit and contingencies to premium ratio implied by a 3% rate increase using your colleague's indicated rate change.

Provide the response for this part in the Excel spreadsheet.

- (e) (0.5 points) State two actions the company can take that could help achieve the target profit, given the 3% rate increase.

Provide the response for this part in the Excel spreadsheet.

6.

(5 points) You are estimating ultimate claims as of December 31, 2022 using the Cape Cod method.

- (a) (0.5 points) Describe why the Cape Cod method may not be appropriate for coverages such as property or automobile collision.

Provide the response for this part in the Excel spreadsheet.

You are given the following for a liability line of business:

Accident Year	On-Level Earned Premiums	Paid Claims	Paid Cumulative Development Factors
2017	14,304,922	8,573,426	1.048
2018	14,662,414	8,699,818	1.097
2019	14,826,526	7,732,920	1.326
2020	15,064,165	5,857,706	1.847
2021	15,448,284	3,561,183	3.146
2022	15,630,481	1,395,852	9.473

- The annual claim trend is 5.0%.
- Tort reform reduced claim costs by 20% for all accidents occurring on or after April 1, 2020.

- (b) (3.5 points) Calculate projected ultimate claims using the Cape Cod method applied to paid claims.

Provide the response for this part in the Excel spreadsheet.

Projected ultimate claims using the Cape Cod method applied to **reported** claims are significantly less than those calculated in part (b).

- (c) (1 point) Describe two situations that could result in such a difference in Cape Cod projections.

Provide the response for this part in the Excel spreadsheet.

7.

(4 points) You are considering various methods to estimate claim liabilities for accident year 2022 as of December 31, 2022.

Recommend a different estimation method to use with each of the following four independent books of business. Justify your recommendations.

- (i) A long-tailed book where the case estimates were strengthened in 2018.
- (ii) A book that has unstable development patterns and experience that has been improving.
- (iii) A quickly growing book of business that has only been writing business for three years.
- (iv) A medium-tailed book of business where the policy limit was increased from 2 million to 3 million, effective January 1, 2019.

ANSWER:

- (i)
- (ii)
- (iii)
- (iv)

8.

(4 points) You are estimating an earthquake catastrophe loading to use in a ratemaking analysis that was determined from a catastrophe model. You are given the following:

Modeled expected earthquake claims	450,000
Date of modeled expected claims cost level	July 1, 2022
Date of in-force exposures reflected in catastrophe model	February 1, 2022
Calendar year 2022 trended earned premium at current rate level	15,450,000
Annual exposure trend	1%
Annual claim severity trend	6%
Effective date of new rates	October 1, 2023

All policies are written for 12-month terms and new rates will be in effect for one year.

- (a) (1 point) Explain why two trend adjustments must be made to the modeled expected earthquake claims to calculate the catastrophe loading for ratemaking.

Provide the response for this part in the Excel spreadsheet.

- (b) (2 points) Calculate the catastrophe loading to be used for ratemaking, as a claim ratio.

Provide the response for this part in the Excel spreadsheet.

- (c) (0.5 points) Describe an additional step or approach that would increase your confidence in the estimate of expected earthquake claims.

Provide the response for this part in the Excel spreadsheet.

Claims following a catastrophe are often subject to demand surge.

- (d) (0.5 points) Describe how you would consider the effect of a demand surge in the calculation of the catastrophe loading for ratemaking.

Provide the response for this part in the Excel spreadsheet.

9.

(5 points) You are estimating unpaid ULAE as of December 31, 2022 for a line of business that has experienced significant inflation over the past five years. You are given the following:

Report Year	Earned Exposures	Estimated Ultimate Claims
2017	23,286	8,297,960
2018	23,595	9,230,643
2019	23,886	10,390,684
2020	24,423	11,357,111
2021	24,490	12,811,927
2022	25,103	14,531,428

Maturity Age in months	Reported Age-to-Ultimate Development Factors
12	2.306
24	1.479
36	1.137
48	1.023
60	1.000

Calendar Year	Paid ULAE	Expected Paid Claims	Expected Reported Claims
2019	725,000	8,950,624	9,323,021
2020	825,176	9,921,833	10,304,355
2021	935,423	11,058,159	?
2022	1,062,610	12,393,344	?

- (a) (1 point) Explain why the classical paid-to-paid method may not be appropriate for estimating unpaid ULAE in this case.

Provide the response for this part in the Excel spreadsheet.

- (b) (2.5 points) Calculate the ULAE ratio for each year using the Mango and Allen smoothing adjustment based on paid and reported claims data.

Provide the response for this part in the Excel spreadsheet.

9. Continued

- (c) (0.5 points) Recommend a ULAE ratio to use for this line of business. Justify your recommendation.

Provide the response for this part in the Excel spreadsheet.

You are provided with the following additional information:

- 40% of ULAE is associated with opening a claim file and 60% relates to maintaining and closing a claim file
 - IBNR is 13,974,912
 - Case estimate is 4,965,557
- (d) (1 point) Calculate unpaid ULAE as of December 31, 2022 using the recommended ratio from part (c).

Provide the response for this part in the Excel spreadsheet.

10.

(5 points) You are given the following estimates of ultimate claims as of December 31, 2022 using various projection methods:

Accident Year (AY)	Paid Claims	Ultimate Claims Derived from Paid Claims			
		Development Method	Frequency-Severity Method	Expected Method	Bornhuetter Ferguson Method
2016	5,536,160	5,905,048	5,978,876	5,942,040	5,907,359
2017	5,562,236	6,328,184	6,384,657	6,361,957	6,332,272
2018	5,351,923	6,826,215	6,858,911	6,849,499	6,831,243
2019	4,867,479	7,452,341	7,354,623	7,435,596	7,446,533
2020	4,015,114	7,951,950	8,011,083	7,939,852	7,945,960
2021	2,890,960	8,509,581	8,494,145	8,541,832	8,530,876
2022	1,312,636	8,195,915	9,200,755	9,329,317	9,147,794
Total	29,536,508	51,169,234	52,283,050	52,400,093	52,142,037

Accident Year (AY)	Reported Claims	Ultimate Claims Derived from Reported Claims			
		Development Method	Frequency-Severity Method	Expected Method	Bornhuetter Ferguson Method
2016	5,561,671	5,655,187	6,262,148	6,328,143	5,666,316
2017	5,933,723	6,134,945	6,683,825	6,775,345	6,155,950
2018	6,156,167	6,750,242	7,178,303	7,294,567	6,798,147
2019	6,144,133	7,522,211	7,699,232	7,918,747	7,594,857
2020	5,866,764	8,412,780	8,388,349	8,455,769	8,425,790
2021	5,256,853	9,598,645	8,887,702	9,096,864	9,371,672
2022	4,063,884	10,558,110	9,633,219	9,935,518	10,175,158
Total	38,983,195	54,632,120	54,732,778	55,804,953	54,187,890

- Investigative testing indicated that case outstanding adequacy was strengthened in 2022.
- The claims manager stated that the settlement of claims has slowed in the most recent two years, but investigative testing did not indicate a change in the pattern of claim settlement for the most recent two years.

10. Continued

You are evaluating these various methods for selecting estimates of ultimate claims.

- (a) (3 points) Evaluate the appropriateness of each of the following methods for estimating ultimate claims:
- (i) Bornhuetter Ferguson method based on reported claims for AY 2018
 - (ii) frequency-severity method based on reported claims for AY 2021
 - (iii) paid development method for AY 2022

ANSWER:

- (i)
- (ii)
- (iii)

- (b) (1.5 points) Recommend the ultimate claims for AY 2020. Justify your recommendation.

ANSWER:

- (c) (0.5 point) Calculate the case estimate and IBNR for AY 2020, based on your recommendation in part (b).

Provide the response for this part in the Excel spreadsheet.

11.

(4 points) You are estimating ultimate claims for a line of business as of December 31, 2022 and are given the following:

Accident Year	Closed Counts						Ultimate Counts
	12	24	36	48	60	72	
2017	399	730	1,007	1,215	1,359	1,365	1,371
2018	417	763	1,063	1,278	1,318		1,330
2019	449	811	1,084	1,213			1,315
2020	459	836	1,077				1,373
2021	498	826					1,421
2022	459						1,413

- Ultimate counts were based on the development method.
- The annual claim severity trend is 5.0%.
- The annual claim frequency trend is 0.2%.

The claims department manager has advised you that there is currently a delay in claims processing.

- (a) (0.5 points) Identify two possible reasons for a delay in claims processing.

Provide the response for this part in the Excel spreadsheet.

- (b) (1 point) Calculate the disposal ratio triangle for this line of business.

Provide the response for this part in the Excel spreadsheet.

- (c) (0.5 points) Interpret the results from part (b).

Provide the response for this part in the Excel spreadsheet.

11. Continued

You have decided to use a Berquist-Sherman approach to adjust for changing settlement rates. The average paid claim varies only by accident year trend. You are given the following:

Average Paid Claim for Calendar Year 2022					
12	24	36	48	60	72
4,400	5,400	5,785	5,982	6,000	6,125

- (d) (2 points) Calculate the adjusted paid claims triangle.

Provide the response for this part in the Excel spreadsheet.

12.

(5 points) You are estimating claim liabilities as of December 31, 2022. You are given the following:

Accident Year	Earned Premiums	Premium On-Level Factors		Projected Ultimate Claims from the Development Method	
		To 2022 Cost Level	To Current Rate Level	Based on Paid Claims	Based on Reported Claims
2017	7,830,576	1.139	1.185	5,515,481	5,396,582
2018	8,092,188	1.133	1.178	5,886,678	5,758,999
2019	8,536,126	1.089	1.133	6,187,315	6,051,964
2020	8,983,907	1.049	1.091	6,565,775	6,448,346
2021	9,288,767	1.034	1.076	7,041,612	6,913,772
2022	9,626,289	1.000	1.040	7,648,572	7,544,729

- The annual claim severity trend is 5.5%.
- The annual claim frequency trend is –0.5%.

- (a) (2.5 points) Calculate expected claims for each accident year using the expected method.

Provide the response for this part in the Excel spreadsheet.

You are given the following:

Accident Year	Reported Claims
2017	5,313,155
2018	5,582,317
2019	5,471,143
2020	5,175,067
2021	4,529,697
2022	3,414,718

- (b) (1 point) Calculate projected ultimate claims using the Bornhuetter Ferguson method with reported claims and your results from part (a).

Provide the response for this part in the Excel spreadsheet.

12. Continued

- (c) (1 point) Assess the reasonableness of the inputs to the Bornhuetter Ferguson method in part (b).

Provide the response for this part in the Excel spreadsheet.

- (d) (0.5 points) Calculate total IBNR using your results from part (b).

Provide the response for this part in the Excel spreadsheet.

13.

(5 points) You are estimating ultimate claims for a medium-tailed line of business evaluated as of December 31, 2022. Your reserving software produces the following preliminary estimates based on a simple application of the development method:

Accident Year	Reported Claims						Ultimate Claims
	12	24	36	48	60	72	
2017	4,490,119	6,618,441	8,018,024	9,424,347	9,996,330	10,121,653	10,248,547
2018	4,892,866	6,982,903	8,630,338	10,114,249	10,671,269		10,940,516
2019	5,116,047	7,389,572	9,267,893	10,572,454			11,466,607
2020	5,687,200	8,006,857	10,230,447				12,900,933
2021	6,277,173	9,059,236					14,220,841
2022	6,920,495						15,636,155

Accident Year	Paid Claims						Ultimate Claims
	12	24	36	48	60	72	
2017	1,950,824	4,523,911	6,506,781	8,594,540	9,886,911	10,121,653	10,361,968
2018	2,077,925	4,668,120	7,007,477	9,239,820	10,671,269		11,184,014
2019	2,061,272	4,882,698	7,493,669	10,572,454			12,771,843
2020	2,431,961	5,348,691	8,813,923				14,375,085
2021	2,726,683	6,334,322					15,811,681
2022	2,996,405						17,138,313

Accident Year	Reported Counts						Ultimate Counts
	12	24	36	48	60	72	
2017	1,193	1,488	1,670	1,850	1,921	1,935	1,949
2018	1,204	1,523	1,701	1,864	1,941		1,969
2019	1,229	1,515	1,738	1,874			1,977
2020	1,236	1,554	1,753				2,023
2021	1,278	1,576					2,053
2022	1,273						2,068

Accident Year	Closed Counts						Ultimate Counts
	12	24	36	48	60	72	
2017	616	1,070	1,401	1,715	1,910	1,935	1,960
2018	614	1,096	1,427	1,729	1,941		1,992
2019	623	1,086	1,463	1,874			2,151
2020	627	1,117	1,566				2,227
2021	648	1,211					2,307
2022	696						2,365

The annual claim severity trend for this line of business is 6.2%.

13. Continued

As part of your claims analysis, you are conducting various investigative tests for evaluating potential changes in case reserve adequacy and/or claim settlement patterns.

- (a) (2.5 points) Analyze this data for evidence of a change in case reserve adequacy, using two different investigative tests. Justify your conclusion.

Provide the response for this part in the Excel spreadsheet.

Your colleague reviewed the triangle of reported claim ratios for this line of business. The most recent diagonal showed a significant increase and your colleague concluded that this is clear evidence of an increase in case outstanding adequacy.

- (b) (0.5 points) Critique your colleague's conclusion.

Provide the response for this part in the Excel spreadsheet.

The ratios of paid to reported claims is one investigative test used to determine if there is evidence of a change in claim settlement patterns.

- (c) (0.5 points) Describe why an increase in the most recent diagonal of the ratios of paid to reported claims triangle may not give a clear indication of such a change.

Provide the response for this part in the Excel spreadsheet.

- (d) (1.5 points) Analyze this data for evidence of a change in claim settlement patterns, using an investigative test other than the test described in part (c). Justify your conclusion.

Provide the response for this part in the Excel spreadsheet.

14.

(6 points) You are estimating ultimate claims as of December 31, 2022 using the development-based frequency-severity method. You are given the following:

Accident Year	Earned Exposures	Ultimate Counts Based on Development Method	Ultimate Severity Based on Development Method
2017	11,434	1,235	4,104
2018	11,635	1,247	4,384
2019	11,681	1,249	4,751
2020	11,821	1,260	5,066
2021	12,044	1,256	5,531
2022	12,240	1,301	5,897

- The annual claim severity trend is 7.5%.
- The earned exposures are not inflation sensitive.

(a) (1.5 points) Recommend an annual claim frequency trend to use for the development-based frequency-severity method. Justify your recommendation.

Provide the response for this part in the Excel spreadsheet.

(b) (3.5 points) Estimate ultimate claims for all accident years using the development-based frequency-severity method.

Provide the response for this part in the Excel spreadsheet.

There are times when projections from the frequency-severity method are preferred over the development method when used as inputs to the expected method.

(c) (1 point) Describe two scenarios when projections from the frequency-severity method are preferred.

Provide the response for this part in the Excel spreadsheet.

****END OF EXAMINATION****