16. (2.5 points)

Given the following information:

Claim ID	Accident Date	2013 Transactions		2014 Transactions		2015 Transactions	
		Calendar Year Payments	Ending Case O/S	Calendar Year Payments	Ending Case O/S	Calendar Year Payments	Ending Case O/S
1	January 1, 2013	80	150	25	100	100	-
2	June 1, 2013	20	50	25	50	100	-
3	May 1, 2014			100	50	50	50
4	December 15, 2014			50	250	150	100
5	April 1, 2015					50	50

a. (0.75 point)

Construct an accident year cumulative paid claims triangle.

b. (0.75 point)

Construct an accident year cumulative reported claims triangle.

c. (0.5 point)

In 2015 the claims department began paying claims faster without changing the adequacy of case reserves. Produce and briefly discuss a triangle that demonstrates that this action has been successfully executed.

d. (0.5 point)

Recommend and briefly justify a technique for calculating ultimate claims for this dataset, given the change noted in part c. above.

QUESTION 16	
TOTAL POINT VALUE: 2.5	**LEARNING OBJECTIVE: B2, B4**
SAMPLE ANSWERS	

Part a: 0.75 point

Cumulative Paid Claim Triangle

Accident Year	12	24	36
2013	100	150	350
2014	150	350	
2015	50		

Part b: 0.75 point

Cumulative Reported Claim Triangle

Accident Year	12	24	36
2013	300	300	350
2014	450	500	
2015	100		

Part c: 0.5 point

Sample Answer 1

Paid-to-Reported Triangle

Accident Year	12	24	36
2013	0.333	0.5	1.0
2014	0.333	0.7	
2015	0.5		

The paid-to-reported triangle shows an increase in the paid-to-reported ratio in calendar year 2015 (latest diagonal) supporting the claims department statement that claims are being paid faster without changing case reserves.

Sample Answer 2

Paid Claims / Reported Triangle

Accident Year	12	24	36
2013	0.333	0.500	1.000
2014	0.333	0.700	
2015	0.500		

Increasing Paid Claims/Reported Claims ratio indicates that paid claims are increasing faster than reported claims; this is occurring from CY 2014 to CY 2015 as evidenced by the two arrows above at 12 months and 24 months. This indicates either that claims are settling faster or that average case per claim is decreasing. We are given in the problem that the claims department hasn't changed case reserve adequacy, so change must be due to quicker settlements.

Part d: 0.5 point
Sample Answer 1   I would recommend using the reported development technique as the payment pattern has changed so paid LDFs would not be accurate in predicting ultimate claims so the paid development technique is not accurate. The reported LDFs should still be accurate because it is not affected by payment patterns and case adequacy has not changed.   *Sample Answer 2*   Since the claims are settled faster, Berquist-Sherman paid method can be used to adjust the paid claim triangle to the level of the new settlement rate.
EXAMINER'S REPORT
Part a
Candidates were expected to build accident year paid claim triangles using transactional claim data.   A common mistake was calculating cumulative case reserves instead of cumulative paids.
Part b
Candidates were expected to build accident year reported claim triangles using transactional claim data.   A common mistake was not including all claims for a particular evaluation date.
Part c
Candidates were expected to create a paid/reported diagnostic triangle to demonstrate the claims department has been paying claims faster. Further, candidates were expected to comment on how the increased ratio of paid claims to reported claims in the latest diagonal demonstrates faster payments. Full credit was also given to candidates who created a reported/paid diagnostic triangle and commented on the decreasing ratio of reported claims to paid claims in the latest diagonal.   Common mistakes included: • Creating a diagnostic triangle other than a paid/reported (or reported/paid triangle) such as paid/case, average paid severity or average case outstanding   • Using paid LDFs as a diagnostic   • Neglecting to explain the ratio increase in the latest diagonal of the paid/reported triangle is a result of faster payments.

Part d

Candidates were expected to know how to adjust the data and estimation techniques when there is a change in the claims handling process. Candidates were expected to explicitly state a technique that was appropriate for the new claims handling process and give sufficient reasoning why the stated technique will accurately calculate ultimate claims.

For candidates to obtain full credit, they could have selected any technique relying on reported claims and mention that this technique is unaffected by the faster payments. Full Credit was awarded to candidates who selected the expected claims method, the reported B-F method or the Cape Cod method, as long as the candidate explained how these methods were not impacted by the change in settlement rates.

Full credit was also awarded to candidates who selected the Paid Berquist Sherman technique and mentioned this technique will restate or adjust the historical paid triangle for the recent change in settlement rates.

Common mistakes included:
- Insufficient reasoning given for the selected technique
- Incorrect technique given
- For candidates who selected the Paid Berquist Sherman technique, some neglected to discuss the fact that the historical paid triangle needs to be restated to account for the faster payment pattern.
- For candidates who selected a reported claims technique, some only mentioned the case adequacy has not changed. It was important to also state the fact that the reported claims technique is not impacted by changes in settlement rates.