14. (3 points)

Given the following information:

Claim ID	Accident Date	Report Date	2011 Transactions		2012 Transactions		2013 Transactions	
			Cal.Yr. Paid	Ending Case O/S	Cal.Yr. Paid	Ending Case O/S	Cal.Yr. Paid	Ending Case O/S
1	March 3, 2011	July 1, 2011	260	0	0	0	0	0
2	September 18, 2011	October 2, 2011	200	500	0	500	230	270
3	December 1, 2011	February 15, 2012			620	0	0	0
4	March 1, 2012	April 1, 2012			200	200	400	0
5	June 15, 2012	September 9, 2012			460	0	0	0
6	September 30, 2012	October 20, 2012			0	400	700	400
7	December 12, 2012	March 11, 2013					300	230
8	April 12, 2013	June 18, 2013					400	200
9	May 28, 2013	July 23, 2013					600	300
10	November 12, 2013	December 5, 2013						100
11	October 30, 2013	January 31, 2014						

- Reported claims are closed when case outstanding equals 0.

a. (2 points)

Create the following cumulative annual triangles organized by accident year:

i. paid claims

ii. reported claims

iii. reported claim count

iv. closed claim count

b. (1 point)

Use the triangles produced in part a. above to generate one additional triangle to show that an operational change took place during the experience period. Identify and briefly describe an operational change consistent with the data.

QUESTION 14		
TOTAL POINT VALUE: 3		**LEARNING OBJECTIVE: B2, B4**
SAMPLE ANSWERS		

Part a: 2 points

i. Paid Claims

	12	24	36
2011	460	1,080	1,310
2012	660	2,060	
2013	1,000		

ii. Reported Claims

	12	24	36
2011	960	1,580	1,580
2012	1,260	2,690	
2013	1,600		

iii. Reported Claim Count

	12	24	36
2011	2	3	3
2012	3	4	
2013	3		

iv. Closed Claim Count

	12	24	36
2011	1	2	2
2012	1	2	
2013	0		

Part b: 1 point

Accepted Answer 1 – Paid / Reported Claims

	12	24	36
2011	0.48	0.68	0.83
2012	0.52	0.77	
2013	0.63		

Ratio of paid to reported claims has increased. This could be due to an increase in payments or a reduction in case reserve adequacy

Accepted Answer 2 – Closed / Reported Claim Counts

	12	24	36
2011	0.5	0.67	0.67
2012	0.33	0.5	
2013	-		

Ratio of closed to reported claim counts has decreased. This could be due to a slowdown in claim closure.

Accepted Answer 3 – Average Case Outstanding

	12	24	36
2011	500	500	270
2012	300	315	
2013	200		

Average case reserve is decreasing. This could be due to a decrease in case reserve adequacy.

Accepted Answer 4 – Average Reported Claim

	12	24	36
2011	480	527	527
2012	420	673	
2013	533		

Average reported is increasing. This could be due to an increase in payments or case reserve adequacy.

Accepted Answer 5 – Average Paid Claim

	12	24	36
2011	460	540	655
2012	660	1,030	
2013	n/a		

Average paid is increasing. This could be due to an increase in payments or a change in the type of claim that is being closed.

Accepted Answer 6 – Insufficient Data

11 claims are not credible enough to draw a conclusion about operational changes.

EXAMINER'S REPORT
The candidate was expected to be able to put together cumulative annual triangles by accident year for paid, reported, reported claim count and closed claim counts. The candidate was also expected to be able to generate a diagnostic triangle that would help identify an operational change and then to be able to briefly discuss the change as it related to the available data.
Part a
The candidate was expected to be able to put together cumulative annual triangles by accident year for paid, reported, reported claim count and closed claim count. The candidates in general scored well on this section. Some candidates had some had difficulties with accident date vs report date in terms of how to slot the claim. Some candidates did not create a cumulative triangle, and there were some arithmetic errors.
Part b
The candidate was expected to be able to generate one additional triangle to show that an operational change took place during the experience period. This part was a little bit more difficult and required analysis of the available data. Overall the candidates scored well, although some of the candidates did not both identify and describe the operational change as it related to the available data. Sometimes there were arithmetic errors.