16. (2.75 points)

Claim #1	
January 4, 2012	Accident occurs
May 1, 2012	Claim is reported and opened with initial case outstanding of $5,000
December 1, 2012	A payment of $2,000 is made and case outstanding is reduced to $4,000
January 15, 2013	Claim is closed with an additional payment of $8,000
June 1, 2013	A deductible amount of $1,000 is recovered on the claim

Claim #2	
December 1, 2012	Accident occurs
January 15, 2013	Claim is reported and opened with initial case outstanding of $1,000
January 31, 2014	Case outstanding is reduced to $500
February 20, 2014	Claim is closed with a total payment of $3,000

Claim #3	
November 1, 2013	Accident occurs
November 3, 2013	Claim is reported and opened with initial case outstanding of $10,000
January 30, 2014	Claim is closed without payment

Claim #4	
July 15, 2014	Accident occurs
July 17, 2014	Claim is reported and opened with initial case outstanding of $3,000

a. (1.75 points)

Using the claims data above, build the following cumulative development triangles with annual December 31 valuations:

i. Report year reported claims net of any recoveries
ii. Accident year paid claims net of any recoveries

b. (1 point)

Briefly discuss one advantage and one disadvantage of using each of the data aggregation methods in part a. above when performing an unpaid claim analysis.

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QUESTION 16	
TOTAL POINT VALUE: 2.75	**LEARNING OBJECTIVE: B1**
SAMPLE ANSWERS	

Part a: 1.75 points

(i). Report year reported claims net of any recoveries

RY	12	24	36
2012	6,000	9,000	9,000
2013	11,000	3,000	
2014	3,000		

(ii). Accident year paid claims net of any recoveries

AY	12	24	36
2012	2,000	9,000	12,000
2013	0	0	
2014	0		

Part b: 1.0 point

One of the items from each section was needed to obtain credit. Note that this list of sample answers is not exhaustive, and other reasonable answers were accepted provided they were adequately supported.

i.

Report Year Advantage

- Claim counts are fixed at the end of the year
- Useful when estimating unpaid claims for claims-made policies
- Only settlement lag, no report lag in estimates
- RY is appropriate when there's a change in social or legal climate that causes severity to be correlated with reported date more than accident date
- Easy to see changes in laws which will predominantly show up when a claim is reported
- More stable development patterns

Report Year Disadvantage

- Does not consider pure (total) IBNR (not useful when estimating IBNYR)
- The disadvantage is that there is no pure IBNR, so report year can be used to estimate IBNER but not IBNR
- Not as commonly used, less benchmark data available

ii.

Accident Year Advantage

- It is a common aggregation method with a lot of benchmarks available
- There are many industry factors compiled on AY so can help supplement analysis
- Easy to understand and collect data
- Data readily available sooner than policy year aggregation
- Useful if there is a change in the legal or economic environment
- Valuable when there's a major claim event (catastrophe, weather, or large loss events)

Accident Year Disadvantage

- Provides an imperfect match between losses and exposure/premium
- Includes claims from policies at different rate levels
- It may mask the changes in policy limits (deductibles) that could have an effect on development patterns
- If there has been a shift in mix of business, method won't be accurate and may correlate better to policy year

EXAMINER'S REPORT

Part a

Candidates were expected to correctly list the aggregated values in a triangle of all 4 claims for both report year reported claims and accident year paid claims

Common errors include forgetting to subtract recoveries, creating an accident year reported triangle (instead of paid), forgetting to put the 36 month evaluation where applicable, assigning individual claims to the wrong accident/report year, calculating incremental instead of cumulative data, and not correctly calculating the appropriate reported or paid amounts.

Candidates generally did well on this part, with many receiving full credit.

Part b

Candidates were expected to list an advantage and disadvantage of report and accident year data aggregation methods.

Candidates struggled with this part. Common errors included: Listing vague advantages/disadvantages that are true of all or most data aggregation methods, listing advantages/disadvantages of reported vs paid triangles, defining report or accident year (but listing no advantages or disadvantages), misunderstanding of report year methodology, and listing incomplete or inaccurate statements.