

25. (1.5 points)

An insurance company has experienced a large claim in accident year 2016. Given the following information for accident year 2016:

Estimated Ultimate ALAE Without Adjustment for Large Claim	
Paid ALAE Development Technique	Paid ALAE to Paid Claims Only Ratio Technique
\$11,000	\$12,000

	Paid Claims Only	Paid ALAE	Ultimate Claims Only	Ultimate ALAE
All Claims	\$7,000	\$2,000	\$30,000	Not Provided
Large Claim	\$0	\$1,500	\$6,000	\$2,000

a. (0.75 point)

Estimate ultimate ALAE for accident year 2016 using the paid ALAE development technique, including an adjustment for the large claim.

b. (0.75 point)

Estimate ultimate ALAE for accident year 2016 using the paid ALAE to paid claims ratio technique, including an adjustment for the large claim.

EXAM 5 SPRING 2017 SAMPLE ANSWERS AND EXAMINER'S REPORT

QUESTION 25	
TOTAL POINT VALUE: 1.5	LEARNING OBJECTIVE(S): B7
SAMPLE ANSWERS	
Part a: 0.75 point	
Paid ALAE CDF = $11,000 / 2,000 = 5.5$ Ultimate = $(2000 - 1500) (5.5) + 2000 = 4750$	
Part b: 0.75 point	
Paid Ratio CDF = $(12,000 / 30,000) / (2000 / 7000) = 1.4$ Ultimate Ratio = $1.4 \times (2000 - 1500) / 7000 = 0.1$ Ultimate ALAE = $0.1 \times (30,000 - 6000) + 2000 = 4400$	
EXAMINER'S REPORT	
Candidates were expected to estimate ultimate ALAE in a situation where a large claim has distorted the ultimate ALAE estimate resulting from standard ALAE techniques. The question required a thorough understanding of both the ALAE development method and the paid ALAE to paid claims ratio method.	
Part a	
Candidates were expected to compute the correct paid ALAE development technique CDF, apply that CDF to the non-large claim paid ALAE to get the all non-large claim ultimate ALAE, then add back in the large claim ultimate ALAE.	
Common errors included:	
<ul style="list-style-type: none"> • Computing a large claim adjustment factor and applying it to the all claims excluding large claim ultimate. This approach neglected to use the large claim ultimate that was provided in the question. • Neglecting to add the large claim ultimate. • Calculating an incorrect development factor. 	
Part b	
Candidates were expected to compute the paid ALAE to paid claims ratio technique CDF, apply the CDF to the ratio of all non-large paid ALAE to all large paid claims to get the ultimate ALAE to claims ratio, and multiply that ratio by all non-large ultimate claims to get all non-large ultimate ALAE. Then, candidates were expected to add the large claim ultimate ALAE.	
Common errors included:	
<ul style="list-style-type: none"> • Miscalculating the development factor as if the method used was not the ratio method, but a standard paid development method. • Not developing the paid ALAE to paid claims ratio to ultimate (i.e. no CDF used in calculation). • Computing a large claim adjustment factor and applying it to the all claims excluding large claim ultimate. This approach neglected to use the large claim ultimate that was provided in the question. • Neglecting to add the large claim ultimate. 	