

16. (1.25 points)

An insurer has the following book of insurance policies and claim experience as of December 31, 2016:

| Policy Number | Policy Effective Date | Policy Term (in Months) | Gross Written Premium |
|---------------|-----------------------|-------------------------|-----------------------|
| 1 | January 1, 2015 | 12 | 12,000 |
| 2 | June 1, 2015 | 6 | 7,000 |
| 3 | August 1, 2015 | 12 | 10,000 |
| 4 | February 1, 2016 | 12 | 15,000 |
| 5 | May 1, 2016 | 6 | 8,000 |

| Claim Number | Accident Date | Claim Report Date | Gross Paid Claims | Gross Case Reserves | Reinsurance Recoveries |
|--------------|-------------------|-------------------|-------------------|---------------------|------------------------|
| 1 | September 1, 2015 | October 1, 2015 | 2,000 | 0 | 0 |
| 2 | November 1, 2015 | January 1, 2016 | 3,000 | 1,000 | 500 |
| 3 | March 1, 2016 | March 1, 2016 | 1,000 | 2,000 | 0 |
| 4 | July 1, 2016 | September 1, 2016 | 4,000 | 0 | 1,000 |

a. (0.5 point)

Calculate the calendar year 2016 gross earned premium.

b. (0.25 point)

Calculate the gross unearned premium as of December 31, 2016.

c. (0.5 point)

Calculate the reported claims net of reinsurance recoveries for accident year 2016 as of December 31, 2016.

SAMPLE ANSWERS AND EXAMINER'S REPORT

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|--|------------------------------------|
| QUESTION 16 | |
| TOTAL POINT VALUE: 1.25 | LEARNING OBJECTIVES: A2, B6 |
| SAMPLE ANSWERS | |
| Part a: 0.5 point | |
| <p>0 for policies 1 and 2 Policy 3: $10K \times 7/12 = 5,833$ Policy 4: $15K \times 11/12 = 13,750$ Policy 5: $8K \times 100\% = 8,000$ Total = 27,583</p> | |
| Part b: 0.25 point | |
| <p>Policy 4 only: $15K \times 1/12 = 1,250$</p> | |
| Part c: 0.5 point | |
| <p>0 for claims 1 and 2 Claim 3: $1000 + 2000 = 3000$ Claim 4: $4000 - 1000 = 3000$ Total = 6000</p> | |
| EXAMINER'S REPORT | |
| <p>Candidates were expected to perform calculations for premium (earned and unearned) and reported loss net of reinsurance.</p> | |
| Part a | |
| <p>Candidates were expected to determine which policies had premium earnings in the period, determine the appropriate earnings ratio, and calculate earned premium.</p> <p>Common errors included:</p> <ul style="list-style-type: none"> • assuming that all policies had earnings in 2016 • incorrect proration of one or more of the policies (for example, a ratio of 5/12 for policy 3 instead of 7/12) | |
| Part b | |
| <p>Candidates were expected to determine which policies had unearned premiums as of the period end, determine the appropriate remaining policy term, and calculate the amount.</p> <p>Common errors included:</p> <ul style="list-style-type: none"> • incorrect policies • incorrect proration terms | |

SAMPLE ANSWERS AND EXAMINER'S REPORT

Part c

Candidates were expected to determine which claims occurred in the policy term and calculate reported loss, net of reinsurance.

Common errors included:

- use of paid loss without case reserves
- incorrect claims used in calculation
- showing only the recoveries