

EXAM 6 – CANADA, SPRING 2015

24. (2 points)

The following information is available from the December 31, 2014 P&C-1 of a property and casualty insurance company. All amounts are in thousands of dollars (\$000s).

PREMIUMS AND CLAIMS (60.20) - Total all lines of business

Premiums written less return premiums - Direct	235,000
Premiums written less return premiums - Assumed	150,000
Premiums written less return premiums - Ceded	155,000
Net unearned premiums at beginning of year	105,000
Net unearned premiums at period end	115,000
Claims incurred including adjustment expenses - Direct	165,000
Claims incurred including adjustment expenses - Assumed	105,000
Claims incurred including adjustment expenses - Ceded	125,000

COMMISSIONS (80.10) - Total all lines of business

Total Gross Commissions (line 39)	65,000
Total Ceded Commissions (line 49)	35,000

STATEMENT OF INCOME (20.30)

Acquisition Expenses - Taxes (line 12)	7,000
Acquisition Expenses - Other (line 14)	8,500
General Expenses (line 16)	12,500
Investment Operations - Income (line 32)	14,000
Investment Operations - Realized Gains (Losses) (line 33)	4,500
Investment Operations - Expenses (line 34)	500
Other Revenues (line 44)	800

- The income tax rate is 22.0%.
- Assume there is no premium deficiency.

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(24 cont.)

Calculate the following:

a. (0.75 point)

Net loss ratio

b. (0.50 point)

Net combined ratio

c. (0.75 point)

Net income

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EXAM 6C SPRING 2015 SAMPLE ANSWERS AND EXAMINER'S REPORT

QUESTION 24	
TOTAL POINT VALUE: 2.00	LEARNING OBJECTIVE: C2
SAMPLE ANSWERS (BY PART, AS APPLICABLE)	
Part a: 0.75 point	
<p>Net Premium Earned = Premiums written less return premiums - Direct</p> <ul style="list-style-type: none"> + Premiums written less return premiums - Assumed - Premiums written less return premiums - Ceded + Net unearned premiums at beginning of year - Net unearned premiums at period end <p>= 220,000</p> <p>Net Claims and Adjustment Expenses = Claims incurred including adjustment expenses – Direct</p> <ul style="list-style-type: none"> + Claims incurred including adjustment expenses – Assumed - Claims incurred including adjustment expenses – Ceded <p>= 145,000</p> <p>Loss Ratio = Net Claims and Adjustment Expenses / Net Premiums Earned = 65.9%.</p>	
Part b: 0.50 point	
<p>1) Expenses = Total Gross Commissions</p> <ul style="list-style-type: none"> - Total Ceded Commissions + Acquisition Expenses – Taxes + Acquisition Expenses - Other + General Expenses <p>= 58,000</p> <p>Combined Ratio = Total Claims and Expenses / Net Premiums Earned = 92.3%</p> <p>2) If Candidate allocated Underwriting expenses to Net Written Premiums :</p> <p>Underwriting/Acquisition Expenses = Total Gross Commissions</p> <ul style="list-style-type: none"> - Total Ceded Commissions + Acquisition Expenses – Taxes + Acquisition Expenses – Other <p>= 45,500</p> <p>Net Written Premiums = Premiums written less return premiums - Direct</p> <ul style="list-style-type: none"> + Premiums written less return premiums - Assumed - Premiums written less return premiums - Ceded <p>= 230,000</p> <p>Underwriting/Acquisition Expenses ratio = 45,500 / 230,000 = 19.8%</p>	

EXAM 6C SPRING 2015 SAMPLE ANSWERS AND EXAMINER'S REPORT

General Expenses ratio = $12,500 / 220,000 = 5.7\%$

Expenses ratio = $19.8\% + 5.7\% = 25.5\%$

Combined ratio = $65.9\% + 25.5\% = 91.4\%$

Part c: 0.75 point

Investment Income = Investment Operations – Income
+ Investment Operations - Realized Gains (Losses)
+ Investment Operations – Expenses
= 18,000

Pre-tax income = Net Premium Earned - Total Claims and Expenses + Investment Income + Other Revenues
= 35,800

Net Income = Pre-tax income * (1 – tax rate) = 27,924

EXAMINER'S REPORT (BY PART, AS APPLICABLE)

When calculations underlying the response from an early part of the question are used in the response to a later part, candidates would not lose credit more than once for a calculation error that affect both parts. For example, if the candidate used net written premiums instead of net earned premiums in part a, but other inputs and calculations were appropriate, the candidate would lose credit only once.

Part a

Most candidates that didn't get full marks weren't able to compute the net earned premiums. They either didn't consider the assumed or ceded premiums or didn't take into account the change in unearned premiums for the calendar year.

Part b

Candidates needed to compute the expense ratio and add it to the net loss ratio to get the combined loss ratio. Common errors were:

- not including net commissions in the expense ratio
- including investment operations expenses or other revenues in the expense ratio.

Part c

Most candidates answered this question well. The most common errors were not applying the tax rate, forgetting to include an element in the expenses or investment income calculation and having the right formula without using the right number from what was given in the question.