

EXAM 5, FALL 2014

2. (1.5 points)

Given the following policy data:

Policy	Effective Date	Expiration Date	Initial Policy Premium
1	June 1, 2012	May 31, 2013	480
2	July 1, 2012	December 31, 2012	125
3	March 1, 2013	February 28, 2014	225
4	August 1, 2013	March 31, 2014	300

- Six months after the policy expires, the initial policy premium on every policy increases by 8% due to the final audit.

a. (0.5 point)

Calculate calendar year 2013 earned premium as of December 31, 2013.

b. (0.5 point)

Calculate calendar year 2013 written premium as of December 31, 2013.

c. (0.25 point)

Calculate policy year 2013 earned premium as of December 31, 2013.

d. (0.25 point)

Calculate policy year 2013 written premium as of December 31, 2014.

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# EXAM 5 FALL 2014 SAMPLE ANSWERS AND EXAMINER'S REPORT

QUESTION 2	
TOTAL POINT VALUE: 1.5	LEARNING OBJECTIVE: A3
SAMPLE ANSWERS	
<b>Part a:</b> 0.5 point	
<p>CY 2013 EP = Policy 1: <math>5/12 \times 480 + 480 \times 0.08 = 238.4</math>  2: <math>125 \times 0.08 = 10</math>  3: <math>10/12 \times 225 = 187.5</math>  4: <math>5/8 \times 300 = 187.5</math></p> <p>CY total EP = <math>238.4 + 10 + 187.5 + 187.5 = 623.4</math></p>	
<b>Part b:</b> 0.5 point	
<p>CY 2013 WP  Policy 1: <math>480 \times 0.08 = 38.4</math>  2: <math>125 \times 0.08 = 10</math>  3: 225  4: 300  Total = 573.4</p>	
<b>Part c:</b> 0.25 point	
<p>PY 2013 EP  Policy 1: 0  2: 0  3: <math>225 \times 10/12 = 187.5</math>  4: <math>300 \times 5/8 = 187.5</math>  Total = 375</p>	
<b>Part d:</b> 0.25 point	
<p>PY 2013 WP  Policy 1: 0  2: 0  3: <math>225 \times 1.08 = 243</math>  4: <math>300 \times 1.08 = 324</math>  Total = 567</p>	
EXAMINER'S REPORT	
<p>This question was rather challenging. Overall very few candidates received full credit and, in general, candidates did better on the questions asking to calculate the 2013 written premium (b and d) as opposed to calculating the 2013 earned premium (a and c).</p>	

## EXAM 5 FALL 2014 SAMPLE ANSWERS AND EXAMINER'S REPORT

<b>Part a</b>
The most common mistakes included multiplying the 8% audit by the 2013 earned premium for policy 1 (instead of total premium), not including the audit for policy 2, and multiplying the policy 4 WP by 5/12. Other mistakes were including the policy 2 premium or including the wrong % earned for some or all of the policies 1 through 3.
<b>Part b</b>
The most common errors were not including the audits for policies 1 and/or 2. Other mistakes included including audit premiums for policies 3 and/or 4.
<b>Part c</b>
The most common errors included multiplying the policies by a wrong % of earned amount, especially policy 4, where many candidates used 5/12 as the % earned.
<b>Part d</b>
The most common errors included not multiplying the premiums for policies 3 and 4 by the 8% audit.