

page 22, sol. 1.11: Combined Ratio = Loss & LAE Ratio + UW Expense Ratio.

page 72, 3rd paragraph: the righthand square represents Calendar Year 2009 earned exposures.

page 142, last paragraph: the numerator, losses, and the denominator, premiums

page 152, spreadsheet in the first exercise: Latest Avg. **Earned** Prem.

page 153, next to last line: once and only **once**.

page 192, solution 5.4: The July 1, 2009 policies are all written at the lower rate level of 1.0.
Half of their premium is earned in CY2010

The July 1, 2010 policies are all written at the higher rate level of 1.2.

Half of their premium is earned in CY2010

The average rate level for 2010 Calendar Year Earned Premiums is:

$$(30\%)(1) + (5\%)(1) + (5\%)(1.2) + (60\%)(1.0340) = \mathbf{1.0304}.$$

Therefore, the on-level factor is: $1.2/1.0304 = 1.165$.

page 306, Q. 6.2: switch the column headings for ULAE and Loss & ALAE

page 360, comment to solution 6.44: $8750/7500 - 1 = \mathbf{16.67\%}$

page 370, solution 6.71 d:

4. For some lines of insurance, salvage and/or subrogation can reduce the net amount paid.

page 488, first sentence: an annual severity trend of 0.5% is selected for the historical period

page 547, Q. 8.46: L = experience losses E_L = experience loss adjustment expenses

page 584, solution 8.26: Trended average fixed expenses: $(1.03^2) (640,000) / 50,000 = \mathbf{13.58}$.

Indicated average premium is: $\frac{90.57 + 13.58}{1 - 10\% - 3\% - 5\%} = 127.01$.

Indicated Rate Change is: $127.01 / 114.33 - 1 = \mathbf{11.1\%}$.

Page 706, sol. 9.46: Dividing by the off-balance factor, gives a balanced change for Territory A of: $(1 - \mathbf{0.188})/1.012 - 1 = -19.7\%$, subject to rounding.

page 727: Balancing Class 2:

$$(1400)(0.8862)(\text{ClassRel}_2)(\$927.27) + (900)(1.1855)(\text{ClassRel}_2)(\$927.27) = \mathbf{\$1,700,000}.$$

page 792, Q. 10.37: and four times a year in **blue**

page 811, sol. 10.13. Relativities should have been weighted by exposures rather than claims.

c) The average age relativity for Large Cars is: $\{(200)(2) + (2000)(1)\} / 2200 = 1.091$.

The adjusted frequency for Large cars is: $(240/2200)/1.091 = 10.00\%$.

The average age relativity for Small Cars is: $\{(800)(2) + (1000)(1)\} / 1800 = 1.444$.

The adjusted frequency for Small cars is: $(320/1800)/1.444 = 12.31\%$.

The relativity for Small cars is: $12.31\%/10.00\% = \mathbf{1.23}$.

d) The average size relativity for Age Group 1 is: $\{(200)(1) + (800)(1.5)\} / 1000 = 1.400$.

The adjusted frequency for Age Group 1 is: $(240/1000)/1.400 = 17.14\%$.

The average size relativity for Age Group 2 is: $\{(2000)(1) + (1000)(1.5)\} / 3000 = 1.167$.

The adjusted frequency for Age Group 2 is: $(320/3000)/1.167 = 9.14\%$.

The relativity for Age Group 1 is: $17.14\%/9.14\% = \mathbf{1.88}$.

page 858: $LER[500] = \frac{300,000 + 350,000 + 280,000 + (500)(320 + 180)}{2,000,000} = 59.00\%$.

page 867, solution to exercise:

$(35)(1350 + 0.1x) = (877.5)(50 + 0.04x) \Rightarrow x = \mathbf{\$106.80}$.

Page 963, sol. 11.27: LAS(\$250,000) rather than LAS(\$250,0000)

Page 1038, in solution to exercise: 4/1/2011 proposed effective date

page 1133, halfway down the page: $(\mathbf{1.0091})(1.0260)(0.9648) = 0.9989$.

page 1141, Q. 14.12: premium is **\$8.97** million.

page 1176, solution 14.34:

Premiums from noncapped territories: $(1.1126)(195,000) + (1.1639)(330,000) = \mathbf{\$601,044}$.

Therefore, in order to make up for the shortfall we need to increase the rates in these territories by an additional: $\$5194/\$601,044 = 0.86\%$.

In order to cap the change in Territory 2, the base territory, we will need to reduce the otherwise indicated base rate by: $1.25/1.2609 - 1 = -0.86\%$.

There are two capping effects, the base rate goes down and we want the rates in Territories 1 and 3 to go up; they each affect the relativities.

Thus in order to get 0.86% more premium in Territories 1 and 3, the new relativities are:

Territory 1: $(0.75)(1.0086)(1.2609/1.25) = 0.76$,

and Territory 3: $(1.20)(1.0086)(1.2609/1.25) = 1.22$.

page 1182, at top: Expected Losses = \sum (class payroll / 100) (class expected loss rate).

page 1193: Company Subject Basic Limits Loss and ALAE Costs = \$181,366

page 1216, question 15.9: reported losses should be in **\$ million**.

page 1327, solution 16.13:

L(2001, 0), L(2002, 1), L(2003, 2), L(2004, 3), L(2005, 4),
L(2002, 0), L(2003, 1), L(2004, 2), L(2005, 3), and L(2006, 4).

Page 1435: the third probability of termination is **8%** = 0.800 - 0.720

page 1437, "Fixed" expense trend = **2%** per annum.

page 1438, second exercise: **121.68** / 108^3 = 96.59.

page 1502, solution 21.35a:

While the final answer was OK, the steps were incorrectly labeled.

Let x be the number of policies written in year 2.

Then the number written in year **3** is 0.9x.

The number written in year **4** is: (0.925)(0.9) x = 0.8325x.

The number terminated in year 3 is: 0.9x - 0.8325x = 0.0675 x.

Set this equal to the given 30: 30 = 0.0675x. \Rightarrow x = 444.

Then the number written in year 3 is: (0.9)(444) = 400.

Thus there are 444 - 400 = 44 policies terminated in year 2.