

**Questions from the 2000 Exam:**

Question 97. (2 points)

Based on Feldblum, "Completing and Using Schedule P," and the following information, determine whether Acme Ins passes IRIS Test 11. Show all work.

Data for Acme Ins (all data are year ending):

|                                    | <u>1996</u> | <u>1997</u> | <u>1998</u> |
|------------------------------------|-------------|-------------|-------------|
| Earned premium                     | 1,100       | 1,500       | 1,750       |
| Loss reserves                      | 1,500       | 2,000       | 3,000       |
| Reinsurance payable on paid losses | 200         | 300         | 300         |
| LAE reserves                       | 1,000       | 1,500       | 1,700       |
| Policyholders surplus              | 8,000       | 9,000       | 10,000      |

Acme Insurances' 1998 Schedule P, Part 2, Summary shows one-year adverse loss development of 600 and two-year adverse loss development of 1,500.

**Solution to Questions from the 2000 Exam:**

Question 97.

**Set up a table similar to the one below and complete the entries**

|  | <u>'96</u> | <u>'97</u> | <u>'98</u> |
|--|------------|------------|------------|
| Earned premium, year ending 12/31/9-         | 1,100      | 1,500      | 1,750      |
| Loss reserves, 12/31/9_                      | 1,500      | 2,000      | 3,000      |
| Reinsurance payable on paid losses, 12/31/9_ | 200        | 300        | 300        |
| Loss adjustment expense reserves, 12/31/9_   | 1,000      | 1,500      | 1,700      |
| Policyholders' surplus, 12/31/9_             | 8,000      | 9,000      | 10,000     |

The "outstanding" loss ratios for 1996 and 1997 are the "restated" loss reserves divided by earned premium.

The "restated" loss reserves are defined as

Loss reserves + LAE reserves + Reinsurance payable on paid losses + Adverse loss development.

|                           | <u>Loss Res</u> | <u>Reins pay</u> | <u>LAE res</u> | <u>Adverse</u> | <u>Total</u> | <u>Ratio to EP</u> |
|---------------------------|-----------------|------------------|----------------|----------------|--------------|--------------------|
| 96 Restated Loss reserves | 1,500           | 200              | 1,000          | 1,500          | 4,200        | 3.818              |
| 97 Restated Loss reserves | 2,000           | 300              | 1,500          | 600            | 4,400        | 2.933              |

- The average restated outstanding loss ratio is  $(3.818 + 2.933) \div 2 = 3.375$ .
- The "required" outstanding losses are  $3.375 \times \$1,750 = \$5,908$ .
- The held reserves at December 31, 1995, are  $\$5000 [= 3,000 + 300 + 1,700]$ .
- The reserve deficiency is  $\$5,908 - \$5,000 = \$908$ .
- The reserve deficiency ratio (to policyholders' surplus) is  $908/10,000 = 9.08\%$ , and since this is less than 25%, the company "passes" IRIS test 11.

**See pages 34 - 35**