

**Updates and Errata for ACTEX Study Manual  
SOA Exam FM, Spring 2017 Edition  
March 16, 2017**

**Page M1-48, Problem 7., last line:**

Replace “ $d(4)$ ” with “ $\delta(4)$ ”

**Page M1-65, Solution to Problem 1., 4<sup>th</sup> line:**

Replace “ $(1 - 0.05/4)^{-4} = 1.05160 - 1 + i$ ” with “ $(1 - 0.05/4)^{-4} = 1.05160 = 1 + i$ ”

**Page M2-14, Example 2.31, last 2 lines should read:**

FV = 20,000, and CPT PMT = **-712.91**  
The level payment is **712.91**.

**Page M2-15, first 2 paragraphs should read:**

The problem of Example (2.31) could also have been solved with the calculator in END mode. In that case, you would enter the same values:

N = 12, I/Y = 4.5, PV = -5,000, FV = 20,000, and CPT PMT = **-744.99**  
**744.99** is the amount you would need to deposit at the *end* of each year. Since this problem involves deposits made one year earlier (at the beginning of each year), the deposits should be smaller by a factor of  $1/(1+i)$ :

$$\frac{744.99}{1.045} = 712.91$$

**Page M2-15, Exercise 2.32, the answer shown is incorrect:**

Replace “708.43” with “**668.33**”

**Page M2-34, Exercise 2.82, the answer shown is incorrect:**

Replace “2,286.96” with “**2,113.35**”

**Page M2-52, equations at bottom of page, the first line should read:**

$$(\bar{Ia})_{\overline{n}|} = \int_{t=0}^n t \cdot v^t \cdot dt = \left[ \frac{t \cdot v^t}{-\delta} + \frac{v^t}{-\delta^2} \right]_{t=0}^n$$

**Page M5-14, Example 5.21, 2<sup>nd</sup> line of 4<sup>th</sup> paragraph:**

Replace “I=15” with “**I=10**”

**Page M5-14, Exercise 5.22, Answers:**

Replace “NPV(B)=5,646.33” with “NPV(B)=5,646.53”

**Page M6-11, Exercise 6.9, Answer:**

Replace “0.0551” with “0.0546”

**Page M6-20, Problem 5., 2<sup>nd</sup> paragraph, 2<sup>nd</sup> line:**

Replace “ $j_n = i_{1,n}$ ” with “ $j_n = i_{1,n+1}$ ”

**Page M7-32, Inequality near bottom of page:**

Replace “ $PV^A(i_0) > PV^L(i)$ ” with “ $PV^A(i) > PV^L(i)$ ”

**Page M7-47, Equation in 3<sup>rd</sup> paragraph:**

Replace “ $D = 0.2638(3) + 0.7362(4) = 3.7362$ ”  
with “ $D_{\text{mac}} = 0.2638(3) + 0.7362(4) = 3.7362$ ”