Errata and Updates for the 15th Edition of the ASM Manual for Exam FM/2
(Last updated 1/12/2022) sorted by page

[1/12/2022] On page 4, Section 1a, several $a(t)'s$ should be $A(t)'s$. Replace the 5th and 6th paragraphs by the following:

We will also define an amount function, $A(t)$, as the AV at time t of k invested at time 0 (rather than 1 invested at time 0). Obviously, $A(t) = ka(t)$. Mathematically, we need only one of these two functions, but having both can be handy. Given the definition of $A(t)$, the effective rate of interest can also be defined as:

$$i_t = \frac{A(t) - A(t-1)}{A(t-1)}$$

because substituting $A(t) = ka(t)$ and $A(t-1) = ka(t-1)$, the k's cancel and we're right back to the original definition. Using this version of the definition of i_t, go ahead and solve for $A(t)$. You should get the following:

$$A(t) = A(t-1) + i_t A(t-1)$$

or

$$A(t) = (1 + i_t)A(t-1).$$

[1/12/2022] On page 4, Section 1a, in the solution to Example 1.1, change the second sentence to: "Then $A(t) = ka(t) = 4a(t)$ and $a(t) = (1/4)A(t) = (1/4)(4t^2 + 8t + 4) = t^2 + 2t + 1$."

[1/12/2022] On page 39, Section 1e, the second equation should be $i^{(m)} = \frac{(1+i)^{1/m}-1}{1/m}$.

[1/7/2022] On page 95, Section 3a, in the solution to Example 3.4, the reference should be to Section 4h.

[1/7/2022] On page 115, Section 3d, in the solution to Example 3.12, in the last paragraph, change ${}_{19}a|_{\overline{25|}}$ to ${}_{19}|a_{\overline{25|}}$.

[1/7/2022] On page 203, Sections 4h-4i, in exercise 21, part I, change $(D\ddot{s}_{\overline{n|}}$ to $(D\ddot{s})_{\overline{n|}}$.

[1/7/2022] On page 212, Sections 4h-4i, in the solution to exercise 24, on the first line, change $(Da)_{\overline{18|}}$ to $(Da)_{\overline{68|}}$.

[1/7/2022] On page 226, Section 4j, in the solution to exercise 13, on the 3rd line, change 897.86 to 897.96 and on the 9th line, change 1.059 to 1.05^9.

[1/7/2022] On page 267, Sections 5d-5e, in exercise 5, on the first line, change "You are giving" to "You are given".

[1/7/2022] On page 272, Sections 5d-5e, in the solution to exercise 16, change "Deposit" to "Interest Earned".

[1/7/2022] On page 291, Section 6a, the solutions to past exam questions should be on a new page.

[1/7/2022] On page 294, Section 6a, in the solution to exercise 23, on the 5th line, change I_2 to I_t.

[1/7/2022] On page 299, Section 6b, in Note 1, change Example 1 to Example 6.7.

[1/7/2022] On page 315, Section 6d, on the last line, change the first number 798.28 to 789.28.

[1/7/2022] On page 322, Section 6d, in the solution to exercise 3, on the first line, change "Same as #9" to "Same as #5" and on the line before the last, change $\ddot{s}_{\overline{3}|}r$ to $\ddot{s}_{\overline{3}|j}$.

[1/7/2022] On page 339, Section 7b, in the Makeham calculation of Bond #1, on the third line, change $g = \frac{Fr}{c}$ to $g = \frac{Fr}{C}$.

[1/7/2022] On page 345, Section 7b, in exercise 23, on the second line, a period after 372.05 is missing.

[1/7/2022] On pages 365-367, Section 7d "price between coupon payment dates" is no longer on the syllabus.

On page 366, Section 7d, last paragraph, third line, change "priced" to "price".

On page 370, Section 7d, part 1 deleted

On pages 371-372, Section 7d, exercises 3, 5, 6, 8, 10, and 11 are no longer on the syllabus.

[1/7/2022] On page 379, Section 7f, in the solution to exercise 6, on the 3rd line, change $g = .0234$ to $g = .02315$.

[1/7/2022] On page 403, Section 9g, in Example 9.25 part (A), change "that" to "than".

[1/7/2022] On page 417, Section 10a, in Example 10.4, change the reference from example 3 to Example 10.3.

[1/7/2022] On page 426, Sections 10a-10f, in Example 10.13, change the reference to Example 10.7.

[1/7/2022] On page 428, Sections 10a-10f, exercise 9 (The method of equated time) is no longer on the syllabus.

[1/12/2022] On page 441, Section 10h, in the solution to Example 10.21, on the last line, change the equation to $\Sigma t^2 v^t A_t > \Sigma t^2 v^t L_t$.

[1/12/2022] On page 462, Section 11a, in the solution to Example 11.10, on the first line, the reference is to Example 11.9.

[1/7/2022] On page 467, Section 11a, in the solution to exercise 6, change the last fraction 50/125 to 150/125.

[1/12/2022] On page 481, Section 11b, the table at the top of the page should be under the first line of exercise 9.

[1/7/2022] On page 497, Practice Exam 1, in exercise 33, on the first line, change FMOC to FOMC.

[1/7/2022] On page 520, Practice Exam 3, replace exercise 28 with the exercise below because the price between coupon payment dates is no longer on the syllabus. The replacement question is:

Question #28: An investor would like to purchase a 15,000 bond but he only has 11,000. To do so, the investor takes out a 5-year loan of 4,000 from a bank and will make interest-only payments at the end of each quarter at a nominal annual interest rate of 6% convertible quarterly. The investor immediately pays 15,000 and buys a 5-year bond with a par value of 15,000 and 8% coupons paid quarterly.

As the investor receives each coupon payment, he immediately makes the interest payment on the loan and reinvests the money left in an account earning an annual effective interest rate of i.

Calculate i if the investor realized an annual effective yield rate of 8.7% on his 11,000 investment over the 5-year period.

(A) 5.18% (B) 5.72% (C) 6.35% (D) 6.91% (E) 7.22%

Solution: At the end of each quarter, the investor receives coupon payments of 15,000(.08/4) = 300 and makes an interest payment of 4,000(.06/4) = 60 on the loan. His net income is 240 at the end

of each quarter which accumulates to $240s_{\overline{20}|j}$, where j is the quarterly interest rate. At the end of 5 years and in addition to the 240, the investor receives 15,000 for the bond and pays off the loan of 4,000. The equation of value at time 5 is: $11{,}000(1.087)^5 = 240s_{\overline{20}|j} + 11{,}000$ which implies $s_{\overline{20}|j} = 23.7218$. Using the financial calculator, $j = .017586$ that gives $i = 1.017586^4 - 1 = 0.0722 = 7.22\%$. ANS. (E)

[1/7/2022] On page 551, Practice Exam 5, in the solution to exercise 4, first paragraph last line, change Example 2 to Example 10.24.

[1/12/2022] On page 562, Practice Exam 6, the table at the top of the page should be under the first line of exercise 21.