I have made the following corrections to Problem Sets and Solutions June 7, 2012:

B.6 Problems

3. Change the column label from $[x] + 2$ to $x + 2$.

D.3 Solutions

9. replace $\ddot{a}^{(4)}_{\infty}$ with $\ddot{a}^{(4)}_{\overline{\infty}|}$.

E.1 Problems

1. Equivalence Principle was added to the given information.

E.1 Solutions

8. I made the solution more detailed to include the following:

   The premium has two parts:

   1. $\bar{P}(\bar{A}_x)$ which is the benefit premium for \$1 of whole life insurance paid at the moment of death. Thus this part of the premium will cover the benefit of 1.
   2. K. This is will pay for the other benefit which is the sum of the premiums paid.

   If the person died after 1 year the total premiums paid would be $\bar{P}(\bar{A}_x) + K$. The person died after 2 years the total premiums paid would be $2[\bar{P}(\bar{A}_x) + K]$. And so on. So the benefit for the return of premiums is an increasing whole life insurance that increases by $\bar{P}(\bar{A}_x) + K$ each year. The APV of the premiums for this benefit must equal the APV of the benefits.

E.2 Solutions

8. in the first equation replace 0.5 with 0.05.

10. in the first equation, first term should be -0.08 instead of -0.8.

E.3 Solutions

5. change “the smaller the total annual payment” to “the larger the total annual payment”.

E.4 Solutions

4. replace 0.01 with 0.1.

F.1 Solutions

- header should be F.1 Solutions.

G.1 Solutions

3. replace 0.65 with 0.25.
6. in the diagram, replace 3000 with 2500.

H.1 Solutions

18. replace 0.2716 with 0.02716.

J.1 Problems

5. All answer choices should be the square root of.

J.1 Solutions

1. replace $1.05^2.5$ with $1.05^{2.5}$.

2. both amounts should be divided by 12. Replace 1.08^{18} and 1.08^{19} with 1.05^{18} and 1.05^{19} respectively.

5. replace "$\delta - 0.04$" with "$\delta = 0.04$". Replace $0.3764N$ with $0.06392N$ and $0.3229N$ with $0.075973N$. The answer is $\sqrt{0.0012}$ instead of 0.0012.