

2, p.115, in the Exercise: \$25,000 **maximum covered loss**

3, sol. 6.122: $(100 + 200 + 400)/3 = 233.3$.

3, sol. 24.51: $1/16 = 0.0625$.

5, sol. 12.35: $\text{StdDev}[Y_i] = \mathbf{E}[Y_i]$

6, pages 187 and 343: such that $\frac{1}{n} \sum_{i=1}^n z_{i1}^2$ is **maximized**,

8, sol. 6.8: The probability that an individual component is still working for $t > 80$ is: $(80/t)^4$.
The probability that the system is still working for $t > 80$ is: $\{(80/t)^4\}^3 = (80/t)^{12}$.
The final solution is correct.

9, p.172 and p.316:

Variance = $\sigma_W^2 (1 + \beta^2)$.

$\gamma_1 = \sigma_W^2 \beta$.

9, p. 207, Sol. 11.2:

$\text{Var}[x_t] = \sigma_W^2 \{1 + (\alpha+\beta)^2 / (1-\alpha^2)\} = (11) \{1 + (0.4 - 0.7)^2 / (1 - 0.4^2)\} = 12.179$.

$\text{Prob}[x_t < 1] = \Phi[(1 - 4) / \sqrt{12.179}] = \Phi[-0.8596] = \mathbf{19.5\%}$.

Also, note that the characteristic equation is: $1 - 0.4B = 0$. The root is: $B = 2.5 > 1$.
Thus this time series is stationary. $\Rightarrow E[x_t] = E[x_{t-1}]$.

10, page 141, second line from the bottom:

then apply the **maximum covered loss** of 10,000.

10, page 141, Q. 11.4: a **maximum covered loss** of 50