

Samples Continuous compounding SOLUTIONS

1. Let F be the final account balance. Then

$$\begin{aligned} F &= 800e^{0.09 \times 3} \\ &= 800e^{0.27} \\ &\approx 1047.97 \end{aligned}$$

Hence the final account balance is approximately \$1047.97 .

2. Let F be the final account balance. Then

$$\begin{aligned} F &= 1000e^{0.01 \times 15} \\ &= 1000e^{0.15} \\ &\approx 1161.83 \end{aligned}$$

Hence the final account balance is approximately \$1161.83 .

3. Let F be the final account balance. Then

$$\begin{aligned} F &= 1000e^{0.01 \times 12} \\ &= 1000e^{0.12} \\ &\approx 1127.50 \end{aligned}$$

Hence the final account balance is approximately \$1127.50 .