

Solution Chapter 5

$$\begin{aligned} 3.5 \quad P &= 150,000 + 150,000(P/A, 10\%, 5) \\ &= 150,000 + 150,000(3.7908) \\ &= \$718,620 \end{aligned}$$

$$\begin{aligned} 3.12 \quad A &= 10,000(F/A, 8\%, 26)(A/P, 8\%, 30) \\ &= 10,000(79.9544)(0.08883) \\ &= \$71,023 \end{aligned}$$

$$\begin{aligned} 3.20 \quad F &= 9000(F/P, 8\%, 11) + 600(F/A, 8\%, 11) + 100(F/A, 8\%, 5) \\ &= 9000(2.3316) + 600(16.6455) + 100(5.8666) \\ &= \$31,558 \end{aligned}$$

$$\begin{aligned} 3.22 \quad \text{Amt, year 5} &= 1000(F/A, 12\%, 4)(F/P, 12\%, 2) + 2000(P/A, 12\%, 7)(P/F, 12\%, 1) \\ &= 1000(4.7793)(1.2544) + 2000(4.5638)(0.8929) \\ &= \$14,145 \end{aligned}$$

$$\begin{aligned} 3.41 \quad 11,000 &= 200 + 300(P/A, 12\%, 9) + 100(P/G, 12\%, 9) - 500(P/F, 12\%, 3) \\ &\quad + x(P/F, 12\%, 3) \\ 11,000 &= 200 + 300(5.3282) + 100(17.3563) - 500(0.7118) + x(0.7118) \\ x &= \$10,989 \end{aligned}$$

$$\begin{aligned} 3.48 \quad P &= [2000(P/A, 12\%, 6) - 200(P/G, 12\%, 6)](F/P, 12\%, 1) \\ &= [2000(4.1114) - 200(8.9302)](1.12) \\ &= \$7209.17 \end{aligned}$$